

DOCUMENT RESUME

ED 050 507

EC 032 221

AUTHOR Garove, William E.; And Others
TITLE The Development of In-Service Programs for
Leadership Personnel Employed in Residential
Institutions for the Mentally Retarded. Final Report.
INSTITUTION Pittsburgh Univ., Pa. School of Education.
SPONS AGENCY Pennsylvania State Dept. of Public Welfare,
Harrisburg.
PUB DATE Aug 70
CONTRACT OEC-21-22366
NOTE 112p.
EDRS PRICE EDRS Price MF-\$0.65 HC-\$6.58
DESCRIPTORS *Inservice Education, *Institutional Administration,
Institutions, *Mentally Handicapped, Professional
Education, *Program Design, Program Development,
*Simulation

ABSTRACT

The purpose of the project was to develop a reality-based simulator with training materials as one component of preservice and inservice training programs for persons in leadership positions in public residential institutions for the mentally handicapped. In order to identify the responsibilities and problems of leadership personnel, site visits, consultations, and personal interviews were conducted. The problems identified concerned medical staff, personnel management, department heads, business management, physical plant, patients, community relations, policies and regulations, and nursing staff. A simulated institution was designed from reality based incidents gathered from interviews in state schools and hospitals for the mentally handicapped. The development of preservice and inservice training exercises to implement the simulator was still in the planning stage at the time the report was written. An assessment of the reliability of the simulator through pilot investigations was also planned. A review of literature and a feasibility study conducted at the beginning of the project led the researchers to believe such a simulated program can provide a vehicle for experimentation and research to produce meaningful changes in the management of real institutions for the mentally handicapped. (CD)

EC032221

ED050507

THE DEVELOPMENT OF AN IN-SERVICE PROGRAM
FOR
LEADERSHIP PERSONNEL
IN
RESIDENTIAL SCHOOLS
FOR THE
MENTALLY RETARDED

GODFREY D. STEVENS

DEPARTMENT OF

WILLIAM E. GAROVE

SPECIAL EDUCATION

EDWARD E. HANDLEY

AND

E. HUGH WOODS

REHABILITATION

SCHOOL OF EDUCATION
UNIVERSITY
OF
PITTSBURGH



AUGUST 31, 1970

Final Report: Contract No. 21-22366

The study reported herein was supported through the Elementary and Secondary Education Act, Title I, Public Law 89-313 with funds granted to the Office of Mental Retardation, Pennsylvania Department of Public Welfare.

Final Report

Contract No. 21-22366

THE DEVELOPMENT OF IN-SERVICE PROGRAMS
FOR LEADERSHIP PERSONNEL EMPLOYED IN RESIDENTIAL
INSTITUTIONS FOR THE MENTALLY RETARDED

William E. Garove
Edward E. Handley
E. Hugh Woods

University of Pittsburgh
Pittsburgh, Pennsylvania 15213

August 31, 1970

Godfrey D. Stevens, Director
William E. Garove, Senior Research Assistant
Edward E. Handley, Graduate Student Assistant
E. Hugh Woods, Graduate Student Assistant

The research and evaluation reported herein was performed pursuant to a contract with the Pennsylvania Department of Public Welfare, Office of Mental Retardation under provisions of the Mental Health, Mental Retardation Act of 1966. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Department of Public Welfare position or policy.

PENNSYLVANIA DEPARTMENT OF PUBLIC WELFARE
OFFICE OF MENTAL RETARDATION

U.S. DEPARTMENT OF HEALTH, EDUCATION
AND WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED
EXACTLY AS RECEIVED FROM THE PERSON OR
ORGANIZATION ORIGINATING IT. POINTS OF
VIEW OR OPINIONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL POSITION OR POLICY

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Purpose	1
Rationale for Project	2
General Rationale	2
Objectives	4
Procedures	4
Definition of Terms	7
II. REVIEW OF THE LITERATURE	9
Simulation: Definitions and Uses	9
Use of Simulation in Education Administration	14
Development and Use of Simulation Materials at the University of Pittsburgh	17
Capabilities of Simulation	18
Limitations of Simulation	24
Application of Simulation for Training in State Schools and Hospitals for the Mentally Retarded	26
Summary	27
III. COLLECTION OF INFORMATION	29
Site Visit to State Office of Mental Retardation	31
Site Visits to Institutions for the Mentally Retarded Outside the State of Pennsylvania	33
Site Visits to Pennsylvania State Schools and Hospitals for the Mentally Retarded	36
Materials and Information Requested from Other States..	42
Conferences with Consultants	44
Site Visits to Prototype Institution and Community	45
IV. SELECTION OF THE PROTOTYPE INSTITUTION	47
Selecting a Prototype Institution	47
Criterion for the Selection of the Prototype	49
The Selection Process	51
V. SELECTION OF THE PROTOTYPE COMMUNITY	53
Rationale for Selection	53
Factors Influencing the Selection	54

CHAPTER	PAGE
VI. DEVELOPMENT OF INSTRUCTIONAL MATERIALS	56
Selection of the In-Basket Technique	57
Selection of the Data Collection Technique	57
Selection of Persons to be Interviewed	58
Field Testing of Interview Technique	58
Collection of Reality-Based Incidents	59
Processing of Reality-Based Incidents to In-Basket and "Live" Item Format	60
Classifying and Coding of In-Basket Items and "Live Items"	60
Planning Development of the Prototype Community and Institution	61
Planning Development of Instructor's Training Manual ..	62
Collection of Pennsylvania Statutes and Policy	63
VII. SUMMARY AND CONCLUSIONS	64
Summary	64
Conclusions	68
BIBLIOGRAPHY	70
APPENDICIES	75
Appendix A	76
Appendix B	77
Appendix C	79
Appendix D	80
Appendix E	84
Appendix F	86
Appendix G	92
Appendix H	95
Appendix I	100
Appendix J	101
Appendix K	103
Appendix L	106

PREFACE

This project was prompted by the Pennsylvania Office of Mental Retardation's increasing concern for providing effective training materials to be utilized in pre-service and in-service training programs for leadership personnel working in residential institutions for the mentally retarded. The Office of Mental Retardation desired modern and effective training materials that would extend beyond traditional didactic instruction. Having been made aware of the capabilities of instructional simulation, the Office of Mental Retardation contracted with the University of Pittsburgh, Department of Special Education and Rehabilitation, to produce a reality-based simulator and accompanying training materials. The University of Pittsburgh was an appropriate choice for the undertaking of such a task because of the recognized expertise of Dr. Richard Wynn, who had a prominent role in the development of the University Council for Educational Administration (UCEA) Madison Simulation Training Materials, and Dr. Godfrey Stevens' leadership in the development and use of special education administration simulation materials.

Gratefully acknowledged is the receptive attitude and co-operation extended to the project staff by the superintendents and leadership personnel of Pennsylvania's schools and hospitals for the mentally retarded. These individuals made a valuable contribution to

the project by providing information necessary for the completion of the simulator and training materials.

Particular appreciation is expressed to Dr. Donald H. Jolly, Commissioner, and Dr. George Soloyanis, Deputy Commissioner, Office of Mental Retardation, Department of Public Welfare, Commonwealth of Pennsylvania. Their support was instrumental in obtaining funds for this project. Their support and the cooperation of the Office of Mental Retardation staff has been continuous throughout the development of this project.

Appreciation is conveyed to the project consultants and leadership personnel representing institutions for the retarded outside the State of Pennsylvania. Information provided by these people required considerable time and effort. Special thanks goes to the staff of the prototype institution and to the leaders of the prototype community for making their resources available for the description of the simulator.

The project staff intends that, (1) the information reported herein warrants the generous response of the participants, (2) the concept of simulation and the description of the development of the simulator and training materials is expressed, and (3) the training materials to be produced will ultimately enhance the care and treatment of the mentally retarded.

Godfrey D. Stevens, Director
William E. Garove, Senior Research Assistant
E. Eugene Handley, Graduate Student Assistant
E. Hugh Woods, Graduate Student Assistant

CHAPTER I

INTRODUCTION

The prominence given to the care and education of the mentally retarded today is well known. Federal, state, local, and private agencies all have plans and contributions for their education and rehabilitation. Consistent with this, the University of Pittsburgh, with cooperation and funding through the Department of Public Welfare, Office of Mental Retardation, Commonwealth of Pennsylvania, assumed the responsibility for developing training materials for leadership personnel employed in Pennsylvania state schools and hospitals for the mentally retarded.

Purpose

The purpose of this project was to develop a reality-based simulator and training materials which are to be one component of pre-service and in-service training programs for persons in leadership positions in public residential institutions for the mentally retarded. The simulator is to be used to examine and develop: (1) decision-making behavior in key leadership personnel; (2) applications of operations research techniques, and personnel management under laboratory conditions; and (3) principles for the operation of residential institutions for the mentally retarded. The simulator will acquaint the trainees with operations research techniques to

2.

enable them to produce innovations within a residential facility.

Rationale for Project

The Pennsylvania Office of Mental Retardation's interest in providing improved pre-service and in-service training of leadership personnel apparently reflects a national concern for adequacy of services for the mentally retarded. The changing nature of the residential institutions and care for mentally retarded is consistent with the need for flexible, practical, effective, and improved modes of training leadership personnel. Simulation for instructional use provides a vehicle for training that both reflects change and is conducive to change.

Specifically, the Pennsylvania Office of Mental Retardation (1) realized the necessity for more appropriate training materials for leadership personnel, (2) was desirous of obtaining training materials that would reflect the changing character of residential institutions, (3) wanted a vehicle for implementing both internal and external institutional changes, (4) desired a mechanism that would better convey the interrelatedness of the state (central office) and the institutions, and (5) wanted training materials that would enhance problem-solving and decision-making skills.

General Rationale

There is an apparent general rationale and justification for a project of this nature. Residential institutions for the care and training of the mentally retarded are generally regarded to be inferior

in meeting the needs of the population which they serve. Many of those which are part of the public welfare structure of the states are overcrowded, understaffed, poorly organized, and inadequately financed. While there are notable exceptions, these statements are supported by the professional literature. (AAMD, 1964; PCMR, 1968; PARC, 1968; Blatt and Kaplan, 1966)

While efforts are being made to correct many of the inadequacies relating to service and physical facilities, little attention has been given to the in-service education of leadership personnel. Education, business, and government have established training programs for their top management personnel. It would seem reasonable to expect that meaningful improvements in the operation of public residential facilities for the mentally retarded could result from the application of examples from other professions.

As pointed out by the President's Committee on Mental Retardation (1968) the problems faced by the residential facilities are of considerable magnitude and complexity. The language of the report is harsh, reflecting the deep concern of the Committee. The implementation of the recommendations will require sophisticated administration. Regardless of the prior training of the leadership staff, all will be faced with changing their own institutions to achieve acceptable standards of performance.

Objectives

1. To review literature relevant to simulation and its application for training leadership personnel.
2. To identify the responsibilities and problems of institutional leadership personnel.
3. To collect information relevant to the description, management, and problems of institutions for the mentally retarded.
4. To design and develop a reality-based simulator with appropriate training materials.
5. To develop pre-service and in-service training exercises to implement the simulator.
6. To assess the reliability of the simulator through pilot investigations.

Procedures

The simulator to be developed is an analogous model of a residential institution for the mentally retarded. Its prototype is an existing facility plus modifications from other existing facilities to insure compatibility with Pennsylvania state schools and hospitals for the mentally retarded. The development of the simulator and training materials involved the following procedures.

1. A meeting was held between officials of the Pennsylvania Office of Mental Retardation and the University of Pittsburgh to discuss the need and means for providing modern and effective training materials for leadership personnel.

5.

2. A study of two months duration was conducted to discern the feasibility of using simulation as a means of pre-service and in-service training for leadership personnel employed by Pennsylvania state schools and hospitals for the mentally retarded.
3. A final report of the feasibility study was prepared which acknowledged the need for the training materials and the feasibility of using simulation for training purposes.
4. A proposal for this project was written and submitted to the Pennsylvania Office of Mental Retardation.
5. Upon approval of the project, a modified PERT (Program Evaluation Review Technique) chart of events and activities was prepared. (See Appendix A and B)
6. The documents acquired and prepared during the feasibility study were reviewed.
7. Literature on simulation was acquired and reviewed.
8. Documents from various institutions for the mentally retarded in the United States were acquired and reviewed.
9. Films concerning the care and treatment of the retarded in institutions were reviewed.
10. Consultants, knowledgeable in institutional organization, management, and care for the mentally retarded as well as consultants regarded as experts in the use of simulation were selected.

6.

11. Plans were devised for site visits to institutions outside the state of Pennsylvania.
12. Initial conferences with superintendents of Pennsylvania state schools and hospitals for the mentally retarded were scheduled and executed to convey the intent of the project and elicit ideas for the project's development.
13. Potential prototype institutions were identified, assessed for compatibility with Pennsylvania institutions, and a prototype institution was selected.
14. Potential prototype communities were identified, assessed for compatibility with communities where Pennsylvania institutions are located, and a community prototype was selected.
15. Site visits were made to both the prototype institution and community to begin the collection of data for the verbal and pictorial descriptions of the prototype.
16. Conferences with consultants were video-taped at the AAMD convention. On-site conferences followed.
17. Interviews were scheduled with leadership personnel in Pennsylvania state schools and hospitals for the mentally retarded.
18. Interviews with leadership personnel for the purpose of collecting "reality-based incidents" were conducted at each of the nine state schools and hospitals.

19. "Reality-based incidents" were written and categorized according to various administrative problems and functions.
20. The final report of the first phase of this project was written.

Definition of Terms

Leadership personnel refers to management personnel employed in Pennsylvania state schools and hospitals for the mentally retarded. The term refers to administrative and supervisory personnel including superintendents and directors and encompasses both "line" and "staff" positions.

Simulation is a simplified representation of reality; in this case, a state school and hospital for the mentally retarded.

A simulator is a laboratory device that enables the operator to reproduce under test conditions phenomena likely to occur in actual conditions. Merriam-Webster (1969) In this application, the simulator takes the form of verbal and pictorial descriptions of an institution for the mentally retarded and its adjoining community.

Superintendent or Director refers to the chief administrator of the state school and hospital for the mentally retarded.

Prototype refers to a standard or typical example. Merriam-Webster (1969) In this project the prototype is an institution for the mentally retarded. The word prototype does not mean the "ideal model" to be followed. It is intended to be characteristic of institutions for the mentally retarded.

Consultant, for the purpose of this study, refers to an individual capable of giving expert advice on the management of institutions for the retarded, care and treatment of the retarded, or on the instructional use of simulation.

Reality-based incidents refer to situations that are likely to occur in Pennsylvania's state schools and hospitals. This connotes incidents that were reported to have actually occurred in the institutions.

Trainee refers to the person being instructed or trained. In this project the trainee is the person receiving pre-service or in-service training by means of simulation.

In-basket items refer to any written correspondence such as letters, memos, messages, that might be received by leadership personnel and to which the trainee would respond during training sessions.

Live items refer to any non-written incidents such as personal encounters, telephone messages or observations to which the trainee would have to respond during training sessions.

Social Simulation Game, the type of simulation game referred to in this project, always consists of a player or players acting in a social environment. It is concerned principally with that part of an individual's environment that consists of other people, groups, and organizations. Boocock and Schild (1968)

Gaming refers to the conducting of games in simulated environments where there is concern for the interactions and relationships among the participants.

CHAPTER II

REVIEW OF THE LITERATURE

A task of this nature and magnitude requires an in-depth review of pertinent literature. In this case, the review of the literature served to acquaint the researchers with the concept of simulation and its use as a technique for training. The review further enabled the researchers to more appropriately convey the concept of simulation and its various uses to all those involved in the development of this project. More than sixty articles relating to simulation were reviewed. Only the most relevant articles are presented in this chapter.

Simulation: Definitions and Uses

Review of the literature provides many definitions and descriptions of the term, "simulation." Merriam-Webster (1969) defined simulation as, "the act or process of simulating; feigning." Wynn (1964) regarded simulation as an accurate representation of a realistic situation. Hovater (1969) described simulation as "the process of conducting experiments on a model instead of attempting the experiment with the real system, process or situation." Another description of simulation, provided by Rice (1966), stated that "simulation is a process that involves the participant [trainee] in decision-making, often under emotional conditions that intensify his motivation." Noel (1969) stated a distinction between

environmental response simulation and computer simulation. Environmental response simulation, the type to be used in this project, involves "live" participants making decisions in an environment, which, in part, includes the symbolic outputs of computer programs. In pure computer simulations, the computer is programmed to make the decisions; that is, the computer simulates aspects of the behavior of individual and/or social entities. There are no "live" players.

Analytics derived from the aforementioned definitions and descriptions provided the following operational definitions and descriptions of simulation for this project.

Simulation will be defined as a simplified representation of reality. It will provide a mode for trainees to solve problems, make decisions, and experiment in a realistic situation, in this case a state school and hospital for the mentally retarded.

Simulation activities will take place in a reality-based simulator. This reality-based simulator will be a replicated state school and hospital for the mentally retarded. Merriam-Webster (1969) defined a simulator as "a laboratory device that enables the operator to reproduce under test conditions phenomena likely to occur in actual performance."

Early users of simulation as a training device were the military, business, and industry. The military has used simulation for training and instructional purposes for a number of years.

Simulated strategic and tactical considerations have been formulated within the military academies and war colleges of Germany, Japan, Britain, and the United States for the past century. Documentation has shown that several military operations of World War I and World War II were the consequence of war game sessions. Contemporary military applications of simulation encompass not only tactical development, but also the training of personnel through simulated devices such as the Link Trainer. Recent military studies of simulation, Hartman and McKenzie (1960), Muckler, Obermayer, Hanlen, Ferio, and Rockway (1961), McNulty (1962), Siegel, Wolf, Warcik and Miehle (1964), and Steinemann (1966), centered on the problems of training crews and military personnel.

In the past decade simulation was used extensively in the behavioral sciences (psychology, social science, political science) and in education. In the social sciences, the branch of psychology has demonstrated the applicability of simulation in laboratory experimentations. L. Jean Thomas (1962) published an extensive bibliography of reports issued by the Behavioral Sciences Laboratory on emergency psychology, training psychology, environmental stress simulation techniques, and physical anthropology. Simulation and its applications to psychology were investigated by Martin and Hall (1960), Seibel (1961), Vandenberg, Green, and Wrigley (1962), and Baker (1963). Siegel, Wolf, and Lanterman (1963), utilizing man-machine simulation, concluded that simulation can be an accurate tool for studying performance and has applications as

a training device. Rome and Rome (1961) presented a theoretical model (Leviathan) for studying the decision-making process. Since investigations into simulation as a training device in the behavioral sciences are of recent date, the value of simulation in these areas is more potential than actual.

Business and industrial application of simulation were reported by Eckman (1961), Greenberger (1962), Greenlaw, Herron, and Rawson (1962), and Hoggatt and Balderston (1963). Broadbent (1967) reported the use of simple functional simulations in business, including the Greene and Sisson's Materials Inventory Management Game that uses simulation to teach a formula for inventory control and the American Management Association's Decision Simulation which includes total enterprise games.

The use of simulation in the social sciences was discussed by Coleman (1961), McKean (1961), and McPhee (1963). Guetzkow (1962), and Guetzkow and others (1963) applied simulation to the study of government and international relations. Noel (1969) described the "POLIS" laboratory (POLITICAL INSTITUTIONS SIMULATION) which is concerned with the use of social simulation and gaming methodologies in instruction and research. The POLIS laboratory encompasses studies concerning the political community in its broadest sense and reflects and encourages interdisciplinary collaboration.

The application of simulation in medicine was reported by McGuire and Babbott (1967). They reported the development of simulated patient-physician encounters using a series of branching problems

in a clinical setting. Examples of simulated clinical problems appeared in the article.

Interest in the use of simulation among educators is reflected in the numerous articles on simulation that appear in professional journals. Perusal of the literature tends to reveal that resources of universities and research institutes have steadily increased in the direction of providing more instructional simulation activities. Wynn (1964) reported that "since 1959 at least sixty-five universities have used simulated materials for training school administrators. Newell and Simon (1961), Laughery and Gregg (1962), and Feigenbaum and Feldman (1963) have shown specific investigations of the teaching-learning process that resulted in simulated models of learners. Research by Pool and Abelson (1961), and McPhee (1963) resulted in simulated models of teachers. Rice (1966) described the use of simulation in the program of teacher education at Indiana University. He believed that "teaching opportunities provided the student teacher....do not adequately represent the many kinds of teaching situations that the beginning teacher may encounter when he gets his first contract," and that simulated experiences can help overcome the deficit. Broadbent (1967) reported the development of a simulated fifth-grade classroom that gave student teachers an opportunity to experience problems faced by beginning teachers. Kersh (1961) described a facility called the Classroom Simulator that permitted student teachers to react to a variety of classroom situations and practice teaching skills under

expert supervision. Utsey, Wallen, and Beldin (1966) developed a filmed simulation for training reading teachers to assess children's reading levels.

Bushnell (1966) examined the computer-based system "CLASS". (Computer-based Laboratory for Automated School Systems) "CLASS" is an example of an automated school information system. Separate areas of "CLASS" were designated for individualized instruction, group instruction, counseling and observation and administration. Parallels between educational data processing and business data processing were noted by Yasaki (1962).

Use of Simulation in Educational Administration

Simulation is presently being used to train educational administrators. The American Association of School Administrators (1960) reported the use of simulated situations, game theory development and problem-oriented seminars. One of the most ambitious applications of simulation to training educational administrators took place under the aegis of UCEA (University Council for Educational Administration). UCEA is responsible for the creation of the original "Whitman Elementary School" and "Jefferson Township School District" simulation materials and the updated "Madison" edition. Both the "Jefferson" and "Madison" materials were research projects. These research projects were developed to provide a mechanism to delineate both performance and personality characteristics of an effective administrator.

Similar procedures are involved in both the "Jefferson" and "Madison" simulation games. Each participant in the games is presented a comprehensive survey and background information on an actual school system whose anonymity is maintained by fictionalizing the names and places of everyone and everything in the prototype school district and community. After becoming thoroughly familiarized with the simulated school system, the participant is "put to work" in various administrative roles such as the elementary and secondary high school principal. This is accomplished by confronting the participant with a series of "in-basket" items to which he must respond. The in-basket items represent a variety of reality-based incidents concerned with personnel, fiscal, pupil, organization, community, transportation, curriculum, and other problems. Some of the in-basket items involve unique and atypical incidents but the majority are concerned with the mundane practical problems of the school administrator. The participant must respond to the in-basket within the context and rules and regulations of the simulated school district. The behavioral responses elicited by the in-basket items are discussed after "gaming" and compared by the participants and sophisticated observers. The UCEA in-basket materials are being used by colleges and universities for both pre-service and in-service education.

The use of simulation to teach decision-making has been researched by Hemphill, Griffiths, and Frederiksen (1962). On the basis of the similar experiences provided to the participants in

simulation, it is hypothesized that unique learning occurs, which is not possible through traditional approaches. Cherryholmes (1966) believed that while this optimistic viewpoint has come under scrutiny, the general belief among educators is that simulation is an effective tool in synthesizing administrative theories and concepts and developing decision-making and problem-solving behavior.

Immegart (1961), Cunningham (1961), and Wynn (1964), have reported the results of individual experiences in using simulation materials. Wynn (1964) acknowledged that participants in simulation reported a high degree of involvement..."They [participants] don't just talk about how the problems might be handled, as is common with case studies, they actually solve the problems...Learning by doing is manifest."

As previously stated, the present UCEA "Madison" training materials resulted from a modification of the original "Whitman" simulator, reported by Hemphill, Griffiths, and Frederiksen (1962). The focus of the original project was on the elementary school principal. As the materials gained acceptance, additional training packets evolved for other administrative positions within the prototype school district.

A significant contribution to the training of administrators of special education was made by Dr. Daniel Sage. Sage (1969) developed the Special Education Administration Task Simulation Game (S.E.A.T.S. Game). The S.E.A.T.S. Game provides students with an opportunity to encounter standardized experiences dealing with

typical problems confronted by special education administrators, and to compare various approaches to the solutions to these problems.

Development and Use of Simulation Materials at the University of Pittsburgh

In 1967 the revised "Madison" simulation materials were released to university members of UCEA at a meeting conducted by the University of Pittsburgh. Study of materials revealed that limited attention had been given to certain aspects of the educational program, notably vocational education and special education. Work on vocational education materials was undertaken at Ohio State University. The Department of Special Education and Rehabilitation at the University of Pittsburgh undertook the responsibility for expanding the revised Madison materials to include the position of Director of Special Education. Presently, the greater portion of these resources have been developed and are being edited for publication and production. The University of Pittsburgh has broadened the training possibilities in the preparation of administrators through a continuum of sequenced experiences that include, (1) didactic instruction, (2) observation, (3) simulation experiences, (4) practicum and internship. Concomitant with didactic instruction, the administration student is introduced to the "Madison" materials and as he advances through the program his experiences with simulation increases. He confronts problems of an increasingly complex nature. This simulation experience is designed to enable the student to gain experience in essential processes that include decision-making,

management, system change, information utilization, and group leadership. The simulation training continues for six trimesters or the equivalent of two academic years. By the time the administration student reaches the internship portion of his program, he has encountered a full range of reality-based incidents under simulated conditions.

Capabilities of Simulation

Rice (1964) believes that simulation is a means of learning that "excels the traditional and pseudo-modern methods of communication." He reports that:

Simulation is a process that involves the participant in decision making, often under emotional conditions that intensify his motivation. It utilizes all materials and techniques of audio-visual communication -- T.V., radio, tapes, slides, films and other source materials and data in a manner that recreates actual situations and activities. Thus, it can place the student in a more realistic environment than any other process of learning, except the actual experience.

Simulation provides a vehicle for the trainee to utilize his previous training and background in the decision-making process as he seeks to resolve problems. Little evidence exists to empirically demonstrate the relative effectiveness of the simulation technique. Boocock (1966), and Cohen (1964) pointed out that simulation is a different way of reinforcing learning. Simulation increases the alternatives open to the trainees for reinforcing learning which has taken place under other circumstances.

Wynn (1964) discussed the capabilities and limitations of simulation as it was used in the preparation or in-service development of administrators and other educational specialists. From his experience with simulation and actual trainee feedback, Wynn discerned the following about the use of simulation:

1. The evident face validity of the situation stimulates interest and motivation in learning and encourages the subject [trainee] to behave as he might in reality.
2. The written record of [trainee] performances results in the accumulation of normative data and permits clinical examination and comparison of "on-the-job" behavior in identical situations.
3. Simulation permits the learner to profit from mistakes that might be disastrous on the job.
4. The instructor in the simulated situation can provide the subject [trainee] with concepts, models, or other information which he can't always send in during the actual game.
5. Simulation provides an opportunity to see the whole picture, to view each problem in broad context.
6. Simulation permits a degree of introspection rarely provided on the real job.
7. [The simulator] presents the subject [trainee] with an interesting object lesson in simulation as a medium of instruction which he may find useful in his own... situation.
8. Simulation presents an extremely useful research medium permitting the collection of normative and comparative data on behavior and performance in identical situations.

Additional strengths of simulated instruction were extracted from a UCEA (1961) publication. They include:

1. Simulation instruction provides a realistic, typical situation giving a practical background for a problem-centered seminar.
2. The simulated situation gets people away from their own experience and problems thereby enabling them to see the commonality of certain types of problems.
3. Students [trainees] encounter a "common experience" and realize their expectancy for something "practical". Such an experience develops a readiness for learning administrative theories because of their "patent application" to specific administrative behavior and situations.
4. Simulated materials [are] intrinsically life-like and challenging...
5. Most participants become ego-involved in many of the problem situations and devote their whole resources to the resolution of conflicts.
6. Simulation...offers a very effective way of demonstrating conceptual design in administration and of applying sound administration theory to practice.
7. [The nature of the materials in terms of problems to be solved is comprehensive in simulated instruction.] As a result of "forced" participation and decision-making, the development of skill in situational analysis and the development of conceptual growth is enhanced.
8. An opportunity to compare administrative behavior of participants is afforded in a common administrative situation, thereby bringing participants to see the variety of responses possible in given situations and to gain deeper insight into the nature and causation of administrative behavior.
9. Participants...have an opportunity to evaluate the many possible types of administrative behavior that occur in practical situations.
10. Responses to in-basket items offer an opportunity for self-analysis and appraisal on the part of each participant.
11. ...self concepts are quickly "brought to the surface," ...ready and unready students [trainees] become easy to identify.

As stated earlier, simulation has been demonstrated to have value as a training vehicle for administrators in education, business, military, engineering and other fields. Monroe (1969) pointed out that simulation has at least three characteristics which make it applicable for use with administrators. First, the simulator is developed utilizing an analogous model which is a single representation of reality. In this project, the analogous model is a prototype institution for the mentally retarded and the prototype community adjacent to the institution. However, Monroe (1969) asserted that a simulation, to be effective, need not replicate the environment most familiar to the trainee. The simulation should contain enough of the characteristics of the real environment to provide practice in meeting contingencies which could occur in the learner's [trainee's] life. Second, the trainee resolves problems without an irrevocable commitment to his solution. Third, a solution to a problem does not change the simulator. All situations are replicable. The nature of the simulated institution can be presented with conditions related to the training needs of the participants. Finally, the trainee is reinforced symbolically. The trainee can see the effects of his work without modifying the essential character of the system. Results, normally a function of time, can be seen immediately. A trainee can operate a system for a predetermined period where one segment of training time can correspond to a much larger segment of real time. This corresponds to what the project staff refers to as the concept of "time compression."

Working in a simulated environment allows for the compressing of time which permits the trainee to encounter more reality-based incidents than would be possible on the job over a longer period of time. For example, the University of Pittsburgh, in developing the simulation materials for the position of Director of Special Education, has completed a corpus of between 400 to 500 in-basket items. By working in the simulator one day a week for six trimesters and responding to the in-basket items, the trainee has the opportunity to make decisions and solve problems on 400 to 500 reality-based incidents. If the trainee does not get the opportunity to respond to certain in-basket items himself, he can observe other trainees doing so.

To recapitulate the capabilities of simulation, as found in the literature and experienced by the project staff, they seem to be as follows:

1. The trainee has the opportunity to participate in decision-making activities under low risk conditions in a reality-based environment. Churchman (1968) explained that an effective use of simulation technique involves the capacity to test alternatives for courses of action prior to the acceptance of one. If the trainee makes an unwise decision, the consequence of his decision is not irreparable; he "bleeds simulated blood" and will profit from his mistakes.
2. After the trainee makes his decision, he gets immediate feedback from his colleagues and the instructor concerning the consequences of his decision.

3. Trainee performance is recorded in a variety of ways. The simulation encounter may be audio and video tape recorded; all correspondence written by the trainee may be kept, reviewed, and assessed, and a recorded account of the kinds of encounters or in-basket items (fiscal, community, etc.) can be kept.
4. Simulation can be used as a research and experimental mechanism. For example, the trainee in the institutional simulator could experiment with changing its entire organization and as a result be able to identify many of the problems he would encounter in changing the organization of an institution in a real-life situation.
5. Simulation permits combining didactic instruction with practical experience. A theoretical model can be applied to a practical situation. A good example would be the application of Griffiths (1959) steps in decision-making to the response to an in-basket item made by a trainee.
6. Simulation enhances the opportunity to perceive problems in a global context. The discussion by the trainee, his colleagues, and the instructor following game time permits a broad-based analysis of the problems and the decisions made.
7. Simulation is conducive to "time compression". Reality-based incidents can be exposed to the trainee at a faster rate than would occur on the job. Specifically, a superintendent may be on the job in an institution years before faced with adverse circumstances like water main breaks, employee strikes, and

disease epidemics, but these circumstances could be simulated in a brief training period and allow practical experience in anticipating and solving problems in such crisis situations.

8. Simulation provides the trainee with a degree of introspection seldom achieved in the real-life situation. Wynn (1964) stated that "simulation holds up the mirror...Subjects [trainees] can look at themselves more self-consciously, more deliberately, more leisurely, and more objectively than is possible when the chips are down." This introspection allows the trainee to look at his behavior critically, identify his administrative style, perceive himself better as others perceive him, strengthen his perception of the effects of his behavior on others and have a more realistic appraisal of his understanding and acceptance of himself.

Limitations of Simulation

Simulation as a means of instruction is not without its limitations. Wynn (1964) reports that:

1. [Simulation] depends heavily upon the competence of the instructor using it.
2. Simulated materials are expensive to produce and are subject to obsolescence.
3. Considerable uninterrupted time is needed for full comprehension of the background materials before in-basket items can be undertaken.
4. There is also the serious question of transferability of learning from the simulated situation to others.

Wynn (1964), referring to the training of school administrators, acknowledged that "more experience is needed with simulation ...before all of its advantages and limitations are clearly perceived."

The following weaknesses were extracted from the UCEA (1961) report on the use of simulation for the instruction of school administrators:

1. [There is] the need to work out the proper use of simulation in an [institution's training program].
2. Oversized groups and the inclusion of a large proportion of individuals without administrative experience were viewed as limitations.
3. Individual work space is needed for in-basket activities.
4. ...some participants...felt forced to play an implied role...in performing [certain] in-baskets. The participants felt this [particular] role restricted their administrative freedom and necessitated their acting in ways inconsistent with the kinds of behavior they would have otherwise preferred to exhibit.

Boocock and Schild (1968) stated:

"That [simulation] games per se are intrinsically limited in their effect: that, in Bruner's terms, they induce 'enactive' and 'iconic' learning but do not lead the player [trainee] to symbolic representation. If so, the game should be linked to other devices; e.g., 'post mortems' in group discussion -- which may produce the symbolic learning desired."

Churchman (1968) provided the following statement that expresses both a major capability and limitation of simulation. He reminded that:

"With the advent of small but highly efficient computers, simulation and gaming may become an accepted way of testing planning ideas in the future. They should not, however, be regarded as an ultimate test, simply because a simulation is only as good as its designer's intention and knowledge."

Application of Simulation for Training in State Schools and Hospitals for the Mentally Retarded

The project staff, having assessed the review of literature on simulation, conferred with sophisticated consultants, visited institutions for the retarded, interviewed leadership personnel working in institutions for the mentally retarded, and on the basis of their own experience with simulation as a means of instruction, have concluded that:

1. Simulation is a feasible means of training leadership personnel employed in state institutions for the mentally retarded and will enhance present pre-service and in-service training programs.
2. A simulator, representative of Pennsylvania, can be developed and tested within the next year, and can be used in Pennsylvania as well as other states.

Simulation as a means of training serves several purposes. Perhaps the most important purpose is training in problem-solving and decision-making in a reality-based situation. Specifically, the simulator being developed for leadership personnel employed in state schools and hospitals for the retarded can be used for both pre-service and in-service training.

First, it may have its greatest potential for use during the employee probationary period. The employee could be afforded the opportunity to engage in problem-solving and decision-making activities at a much higher frequency than on the job. The employee's superordinates would have many more opportunities to observe him under a greater variety of reality-based conditions than he would under normal conditions. In this context, the simulator would be used as a training, screening, and selection device.

Second, simulation can be used for teaching. Simulation affords the opportunity to teach theories and principles of administration, supervision, and other components of management. Decision-making principles can be taught and applied to reality-based problems in the context of an institution for the mentally retarded. Rules, regulations, laws and policies -- both state and institutional, can be taught via trainee resolutions to the problems encountered in the simulator.

Third, simulation can be used for research. In the state schools and hospitals for the retarded, simulation can be used for research and experimentation with such things as organizational change, program development, personnel change, and the like. New ideas and changes can be tried on the simulator under low risk conditions and problems, alternatives, and solutions can be identified that might be both beneficial or disastrous to the real institution.

Summary

Simulation as a means of training has been used by the military, business, industry, behavioral sciences, medicine, education and others. Simulation has many definitions but can most practically be defined in the sense of this project as a simplified representation of reality. Simulation, for instructional use, has capabilities which include problem-solving and decision-making opportunities under low risk conditions, time compression, immediate feedback, records of performance, trainee introspection, and use as an experimentation and research mechanism. The limitations of

28.

simulation include a heavy reliance upon the competence of the instructor, materials are subject to obsolescence, the need for considerable uninterrupted time to comprehend the background material, lack of empirical evidence concerning the transferability of learning, and the need for more experience in the use of simulation. A reality-based simulator of an institution for the mentally retarded can be developed making simulation feasible for training leadership personnel employed in Pennsylvania state schools and hospitals for the mentally retarded.

CHAPTER III

COLLECTION OF INFORMATION

The effectiveness of simulation is determined primarily by the content of the training materials. The metaphor employed by computer scientists, "garbage in, garbage out", reflects this need for effective content. Simulation, like the computer, is a tool which is dependent upon content for effectiveness. The collection of precise information is therefore critical to the task of developing simulation training materials for Pennsylvania's leadership personnel. Such precision will impede the accumulation of figurative "garbage" in the training materials.

Comprehensive descriptions of the problems associated with the management of institutions for the mentally retarded in Pennsylvania have not previously been assembled. It, therefore, became the task of the project staff to collect extensive data which effectively described existing institutional management problems. It was hypothesized that these institutional and hospital management problems would not be entirely unique to Pennsylvania and that it would be advantageous to ascertain management problems which exist in similar institutions in other states. Finally, it was believed that the opinions of experts in the fields of mental retardation, and specifically the institutional care of the mentally retarded, would be of value in the preparation of training materials.

The information collection phase of the project included the following activities:

1. Site visit to State Office of Mental Retardation to present project concept, consult with central office staff, and collect information.
2. Site visits to institutions for the mentally retarded outside of Pennsylvania to collect information, consult with administrators and present project concept.
3. Site visits to Pennsylvania state schools and hospitals for the mentally retarded to introduce project staff, present project concept, and arrange for and conduct staff interviews to collect reality-based incidents and materials.
4. Request and collect information from institutions in other states which described institutional administrative activities and procedures.
5. Conduct conference with consultants with expertise in the fields of mental retardation and/or institutional care of the mentally retarded.
6. Site visit to prototype community and institution to present project concept, obtain approval for, and conduct collection of, background and descriptive materials and assembling of pictorial presentation of both the prototype institution and prototype community.

Site Visit to State Office of Mental Retardation

The initial visit to the Office of Mental Retardation in Harrisburg occurred as a part of the project feasibility study conducted from July 1, 1969 to August 31, 1969, by O'Neil and described in the final report to the Department of Public Welfare, Office of Mental Retardation (OMR), August 31, 1969. This visit was summarized in the following manner:

A. General Impressions

The Office of Mental Retardation is responsible for nine state schools and hospitals which vary widely in purpose, organization, and programs. A review of representative information available in OMR suggests that sufficient prime source data can be made available to begin to describe the elements to be included in the programs. When this information is coupled with information available at the sites and interviews, it should be possible to describe each element with adequate precision. OMR personnel and administrators at the sites have expressed willingness to cooperate and can be consulted for technical assistance and advice.

While most information available in Harrisburg is centralized in OMR, other state and local offices can be contacted for supplementary data. No attempt has been made to determine the extent of information available in the field.

B. Information Review

1. 1968-69 Annual Report - OMR
2. 1967-68 Annual Report - OMR
3. 1969-70 Budget Estimates - OMR
4. 1968-69 Budget Estimates - Representative Institutions
5. 1969-74 Budget Estimates - Representative Institutions
6. PPBS Development Materials - OMR
7. M.R. persons receiving in-patient care at state expense - 1968 (OMR 2.9)
8. General Budget - Commonwealth of Pennsylvania - 1968-1969
9. A plan for Cooperative State Action (PARC - 1968)
10. AAMD Evaluation Final Reports - 1967
11. AAMD Self-Evaluation Reports - 1967
12. Public Welfare Report - 1968
13. The Comprehensive M.R. Report - 1965
14. The Comprehensive M.R. Report Appendix - 1965
15. Annual Auditor's Reports - 1968-69 - Representative Institutions
16. Monthly Superintendents' Reports - Representative Institutions
17. Revised Table of Organization
18. Miscellaneous materials related to construction, maintenance, education, therapies, social services supplied through consultant interviews
19. Miscellaneous correspondence, bulletins and memoranda supplied by Dr. Soleyans
20. DPW Manual of Regulations
21. Representative job descriptions

C. Interviews Conducted

1. Dr. George Soleyans - OMR, Director of Treatment Services
2. Mr. Joseph Scartelli - OMR, Chief Consultant, Social Services
3. Mr. Morris Nansen - OMR, Consultant, Social Services
4. Miss Bernice Baumgartner - OMR, Consultant, Education
5. Miss Ann Evans - OMR, Consultant, Therapeutic Activities

D. Results of Interviews

The objectives for interviews conducted were to: (1) acquaint each interviewee with the project, (2) invite cooperation and involvement, (3) receive gross overview of responsibilities of

each interviewee, (4) receive information about objectives, programs, personnel and availability of source material. The interviews achieved these objectives. The project staff is welcome to return as necessary to the sites and to OMR and can anticipate cooperation. It is apparent that a shortage of material exists which describe programs either in operation or in planning. The budget expectations report these in gross form, but specific content is absent. It is possible that this statement may prove inaccurate as our familiarity with site personnel throughout the state grows. Additional visits in 1970 and 1971 are anticipated to collect specific background information and materials for use in the simulator.

Site Visits to Institutions for the Mentally Retarded Outside the State of Pennsylvania

Site visits to institutions outside the state of Pennsylvania were conducted both as a part of the feasibility study by O'Neil (1969) and the current project. The general objectives of these visits were as follows:

1. To inform administrators about the project.
2. To invite active cooperation and involvement in the future.
3. To obtain an overview of the service programs of each institution.
4. To study objectives, programs, personnel, and availability of source information.

5. To identify an institution and community which might effectively serve as the prototype for the simulator.

In chronological order, the following sites were visited:

1. Columbus State Institute and Clinic, Ohio
2. Newark State School, New York
3. Lincoln State School, Illinois
4. Office of Mental Retardation, Illinois
5. Wayne County Child Development Center, Michigan
6. Plymouth State Home and Training School, Michigan
7. Johnstone Research and Training Center, New Jersey
8. Vineland State School, New Jersey
9. Central Wisconsin Colony and Training School, Wisconsin
10. Northern Wisconsin Colony and Training School, Wisconsin

Eight of the ten out-of-state visits were conducted during the feasibility study. Pertinent results are reported in that document. (O'Neil, 1969)

The out-of-state visits broadened the base of information which can be used in development of the simulator.

There are a wide range of organizational patterns for operation of institutions. These patterns reflect a state's philosophy about the inclusive functions involved in institutional management: (1) resident care, (2) medical services, and (3) education and training. In almost all cases, there is a strong emphasis on resident care, with the responsible person in that service playing a strong role in institutional decision-making.

There is no consistent pattern for existing administrative organizations. The position of the superintendent is usually filled by a person who reflects the philosophy of the State legislature or the office responsible for operating the institutions. Michigan,

New York, and Ohio presently use a medical model, although all three states are re-examining this philosophy. New Jersey fills the superintendency with a person who can direct the education and training activities of the institution. Illinois is undergoing a transition and no one pattern determines the training of the superintendent.

Below the superintendent, the organization is usually a product of the superintendent. Each person interviewed had developed a system which primarily reflected his perceptions of the objectives of the institution, and secondarily, showed a reliance on the availability of a competent person in a given position. Consequently, institutional organization is unique to each situation. This pattern is changing as states strive to comply with AAMD standards.

Despite the differences in organization and programming, there is a degree of commonality in the problems faced by the superintendent and his staff. The most frequent problems are:

1. Recruiting and training professional and non-professional staff.
2. Communication between the institution and the state office.
3. Management - labor relations.
4. Over-crowding.
5. Public relations.
6. Program development.

7. Development of community living standards for
releasable residents.

The commonality of problems suggests that the training offered to administrators can be based on concern for developing solutions. Superintendents share the same challenges regardless of the nature of the institution which may aid trainees in identifying with a simulated environment.

Site Visits to Pennsylvania State Schools and Hospitals for the
Mentally Retarded

The portion of the project allotted for visits to Pennsylvania state schools and hospitals included two visits to each of the nine institutions. The initial visit served as the orientation visit while the second visit provided the opportunity to interview staff and collect reality-based incidents and materials.

The initial visits listed below in chronological order were arranged in a sequence which was geographically convenient. With two exceptions, the plan called for the staff to visit the nine institutions in a west to east sequence. The name of the institution, the personnel interviewed, and the date visited, during the initial orientation visit are as follows:

Western State School and Hospital Dr. Perpel, Superintendent	5/25/70
Cresson State School and Hospital Dr. Connelly, Superintendent	6/2/70
Ebensburg State School and Hospital Dr. Connelly, Superintendent	6/2/70

Laurelton State School and Hospital
Dr. Kroner, Superintendent 6/3/70

Selinsgrove State School and Hospital
Dr. Zimmerman, Superintendent 6/3/70

White Haven State School and Hospital
Mr. Mastrolia, Personnel Officer 6/4/70

Hamburg State School and Hospital
Dr. Potkonski, Superintendent 6/4/70

Pennhurst State School and Hospital
Dr. Jolly, Acting Superintendent 6/5/70

Polk State School and Hospital
Dr. McClelland, Superintendent 6/22/70

The content of the initial visit followed the sequence
listed below:

I. Introduction of project staff.

II. Explanation of project.

A. Origin of idea
B. Relationship with Office of Mental
Retardation and University of Pittsburgh

III. Description of institution involvement.

IV. Arrangement for a second visit and interviews
with leadership personnel.

V. Establish date and format for return visit.

The initial visit varied in length from ten minutes to
three hours. A few of the individuals interviewed were interested
only in the factual information; i.e., "What do you want me to do,
when do you want me to do it, how many of my staff will be in-
volved, who sent you, etc." The majority of those interviewed on
the initial visit were most interested in the simulation training

concept and their questions centered around the sorts of information needed, how the training program would be conducted, and whether simulation training had ever been done in other institutions. The project staff found many individuals anxious to begin immediately and each superintendent related specific incidents to the staff demonstrating the types of problems they encounter on a day-to-day basis.

Without exception the superintendents were most cooperative and helpful in arranging for our initial and subsequent visits. They were fully willing to arrange for us to meet with individual staff members and handle the arrangements of scheduling leadership personnel and meeting locations for the second visit.

The second visits to the institutions for staff interviews were scheduled from three to seven weeks following the initial interview. The schedule of interview visits was as follows:

June 23, 1970	Ebensburg State School and Hospital
June 24, 1970	Cresson State School and Hospital
July 7, 1970	Laurelton State School and Hospital
July 8, 1970	Selinsgrove State School and Hospital
July 14, 1970	White Haven State School and Hospital
July 15, 1970	Hamburg State School and Hospital
July 16, 1970	Pennhurst State School and Hospital
July 20, 1970	Polk State School and Hospital
July 23, 1970	Western State School and Hospital

A letter of explanation (see Appendix D) was forwarded to each of the nine superintendents summarizing the project concept. Included in the letter was a blank schedule form which the project staff requested be completed by the institution. The schedule provided for individual hour-long interviews with leadership personnel,

three interviews per hour, for six hours, for a total of eighteen interviews per day. Included in the cover letter were suggested positions we wished to interview. They included the Superintendent, Assistant Superintendent, Division Directors, Business Manager, Personnel Officer, Education, Research, Hospital, Program Services, Nursing Unit or Ward Directors. The completed interview schedules were either forwarded to the staff office or held at the institution.

Other than general suggestions from the project staff, the selection of those individuals to be interviewed was left entirely to the discretion of the superintendent or his appointee. The positions interviewed are listed in the appendix by both institution and grand total. (See Appendix G)

Three of the project staff members visited each of the institutions for the staff interviews. The interviews were conducted in designated conference rooms or in the office or job location of the interviewee. Approximately half of the interviews were conducted at centrally located meeting rooms while the remainder were conducted at the interviewees' office or job site. A subjective observation at this point would be that the interviewees appeared more relaxed and at ease when the interview was conducted in their own office or job location.

The project staff concluded that approximately one-fourth of the individuals interviewed knew nothing of the purpose of our visit other than that they were to report to be interviewed. Another one-fourth of those interviewed knew precisely the purpose of our visit

and were prepared to provide the needed information. The remaining interviewees voiced varying degrees of knowledge concerning the purpose of the interview. Some interviewees prepared lists of information and paragraphs describing reality-based incidents. Other interviewees were kind enough to provide photocopies of actual correspondence that would provide in-basket items with absolute face validity. Absolute anonymity was assured regarding actual correspondence. Names and other identifying characteristics have been deleted. When not immediately available, these copies were forwarded by mail to our office.

In general, the quality and quantity of information collected appeared to have little to do with the amount of information the interviewee received concerning the purpose of the interview prior to the meeting.

The project staff interviewers followed an interview outline prepared for consistency in presentation and questioning. A copy of the interview outline and questionnaire is included in Appendix E. Generally, the interview followed this sequence:

- I. Staff member self-introduction.
- II. Explanation of the purpose of the interview and project.
- III. Assurance of the confidential and anonymous nature of the interview.
- IV. Five general questions which asked for information concerning their particular job activities.
- V. Collection of specific in-basket items as described by the interviewee.
- VI. Interview summary, conclusion, and thanks.

In that the purpose of the interview was to collect specific incidents, the interviewer attempted to limit the conversation to specific examples of incidents and problems rather than just a general discussion of problems encountered in a particular position. For example, a comment such as, "The real problem with this job is people" would be followed by the interviewer question, "Can you give me a specific example?"

The specific incidents or in-basket items were recorded by the interviewer on forms presenting different modes of communication. If the problem was a letter from a parent, the Letter Form (see Appendix F) was selected and the essence of the letter was written on the form. If the incident was a telephone conversation, the incident was recorded on the Phone Call Form. Copies of these Incident Recording Forms appear in the appendix. (See Appendix F)

Upon returning from the respective institutions, the project staff members rewrote the incidents into in-basket items using their hastily scribbled notes for the essential information. Particulars of each incident were modified to fit the simulated institution. Characteristics of an item that would tend to identify a particular institution were eliminated.

Following the completion of the staff interviews at the institution, a letter was mailed to the superintendent thanking him for his cooperation and requesting that he convey the project staff's gratitude to the interview participants. Attached to this letter was a form requesting the superintendent to rank in numerical

order of occurrence the nine categories of problems the project staff discerned from the items collected. This information from the nine superintendents will provide additional information needed to determine the number of items of various categories to be included in the final training package. (See Appendix I)

Materials and Information Requested From Other States

During an early stage of the project letters were sent to 198 state institutions for the mentally retarded in the United States requesting that they forward copies of their policies, procedures and regulations relating to the care of the mentally retarded. Of the 198 requests mailed, fifty-five responses have been received to date. The responses varied from a single page letter informing us of their inability to cooperate with the project to large bundles of brochures and pamphlets detailing the policies, procedures and regulations of their institutions.

In general, this information provided the staff with three things:

1. General background information concerning the management of institutions for the mentally retarded.
2. Specific comparative information useful in determining the quality and quantity of Pennsylvania materials when compared to materials produced in other states.
3. Material for the generation of additional in-basket items.

The materials received provided insight into the types of policies, procedures and regulations other states find necessary for the management of institutions for the mentally retarded. Many of the packages received included program descriptions which allowed the staff to gain some understanding of programs as they exist in other states.

The specific comparative information assembled allowed the staff to perform a collective analysis of documents to determine the kinds and quality of institutional services. Such a comparison revealed strengths and weaknesses in both programs and materials and provided input for the simulator. The input referred to new ideas, policies, procedures, regulations, programs and the like, amenable to research and experimentation in the simulator.

The out-of-state materials also provided information for the generation of in-basket items in that they: (1) suggested problems that Pennsylvania institutions might not as yet have faced, (2) provided various approaches that Pennsylvania might wish to apply, and (3) demonstrated the commonality of problems from state to state which strengthened the project staff's decisions to include or exclude specific incidents.

In summary, the collection and collating of these documents from other states provided another perspective in viewing the management problems of Pennsylvania's state schools and hospitals for the mentally retarded.

Conferences with Consultants

Despite the project staff's collective experiences in mental retardation, administration, and simulation training, they did not profess expertise in the area of administration of schools and hospitals for the mentally retarded. Project consultants were relied upon to provide this specific knowledge when necessary. The original project design had called for selected consultants to travel to the University of Pittsburgh for consultation. An alternate approach was suggested and carried out quite successfully at greater benefit to both the consultants and the project.

The alternate approach to the use of consultants in the project capitalized on another professional activity which occurred simultaneously in Washington, D.C. The American Association of Mental Deficiency (AAMD) annual convention, May 24-29, 1970, attracted outstanding authorities in both the fields of mental retardation and residential treatment facilities for the mentally retarded. This convention provided the consultants the project staff wished to contact. From this unique opportunity arrangements were made for the project staff to conduct interviews and discussions with the consultants and record these interviews on video tape. The general interviews, conducted by the project director, Godfrey D. Stevens, explored the topics of management problems, current status, training procedures, and anticipated changes in the management of residential facilities for the mentally retarded. The video taping of the interviews and the general concept of the project stimulated

considerable discussion at the convention and interest in the steps Pennsylvania is taking in the training of leadership personnel. These video tapes are presently being edited and will be included in the final project package.

Extensive consultation took place in Wisconsin, a recognized national leader in the care and treatment of the mentally retarded. The consultations included on-site visits to the institutions, interviews with staff, and conferences with state office personnel. A complete listing of the project consultants is included in the Appendix. (See Appendix J)

Site Visits to Prototype Institution and Community

The final aspect of the information collection phase of the project involved the selection and subsequent visit to the institution and community selected as the simulator prototype. The process of selection will be discussed in a section of this report to follow.

An initial visit was arranged to ascertain the appropriateness of the institution and surrounding community. During this initial visit an interview was held with the superintendent and the project concept was explained, and cooperation was requested. A tour of the institution and community, coupled with interviews with institution staff members and community residents, provided additional information to assist in making the final selection of the prototype. Arrangements were then made for a return visit to the institution and community to actually collect the information.

The purpose of the second visit to the prototype institution and community was to collect descriptive information in the form of historical background, descriptions of physical facilities and surroundings, geographic and demographic information, and a pictorial representation of the institution and community.

The assistance of the superintendent and his secretary at the prototype institution was secured in assembling specific information concerning the institution. The community library director assisted the staff in assembling information which related to the community. Color slides of both the institution and the community were assembled to provide a visual description of the prototype institution.

The descriptive information and slides were edited to remove all identifying characteristics of the prototype institution and community. Editing was done to enable the prototypes to correspond with institutional and community settings found in Pennsylvania. The remaining steps taken to produce the verbal and pictorial description of the prototype community and institution will be described in a section to follow.

The collection of information phase of the project terminated with the storage of the assembled documents in an information retrieval system which permitted the systematic recovery of this information during the materials production phase of the project.

CHAPTER IV

SELECTION OF THE PROTOTYPE INSTITUTION

Selecting a Prototype Institution

The process of simulation training has as its base the use of realistic training environments. The trainee acquires the feeling that he is actually performing on the job through exposure to pictorial and descriptive information which portrays his actual work setting. It became important in the training of leadership personnel in state institutions for the mentally retarded to provide a realistic training environment which would closely resemble or approximate institutional settings in Pennsylvania. To facilitate this training, instructional materials were designed to include a comprehensive description of the institution where the trainees would theoretically be employed.

The rationale behind the creation of a simulated institution rather than the use of an existing institution in Pennsylvania was based on, (1) the intent to broaden the simulator's training capabilities for use with leadership personnel employed in out-of-state institutions, (2) the desire to eliminate or reduce preconceptions or biases on the part of the trainees concerning existing institutions, and (3) to allow the trainees to extricate themselves from their present roles and accept a new role at the simulated institution. For example, it would be difficult for a trainee to assume

the role of superintendent at any existing Pennsylvania state school and hospital without bringing with him preconceptions and biases about the particular institution. In addition, the use of a simulated institution facilitates training through consistency in rules and regulations. The pitfall of participants referring to "the way we do it back where I work" . . . is avoided. All trainees share a common frame of reference working at the "simulated" institution.

In creating the simulated institution, the need for compatibility with Pennsylvania's existing institutions was obvious because the materials were specifically designed for training in Pennsylvania. To allow the trainees to train in a simulated institution which portrayed an ideal setting with unlimited funds, new facilities, unlimited staff, etc., would not provide the necessary reality. The simulated institution had to bear close resemblance to the existing institutions, yet possess an identity of its own. In effect, the project staff created a tenth state school and hospital in Pennsylvania to be used as the simulation training site.

It was agreed that the task of creating a detailed description of a fictitious institution would have been monumental and probably ineffective. Instead, an institution with similar characteristics was located in another state. The simulated institution is an actual institution and not a contrivance. Its identifying characteristics were removed to insure anonymity.

Criterion for the Selection of the Prototype

The prototype institution had to closely resemble a "typical" Pennsylvania institution in order to provide the reality-base necessary for simulation training. Similarities should exist in the physical, historical, and organizational characteristics of the prototype institution.

Physical characteristics were the first obvious considerations in the selection of a prototype institution. It was important to the reality concept that the prototype look like a Pennsylvania institution. This led to the question, "What are the physical characteristics of a 'typical' state institution for the mentally retarded in Pennsylvania?" A tour of the nine state institutions revealed a wide variety of physical plants. Two of the institutions are of recent construction and have modern, one-story buildings. The seven remaining institutions would seem more "typical". For the most part, they might be described as large rural institutions with a collection of buildings ranging from the very old to the very new. Typical of the institutions are gated entrance ways, winding drive-ways, well-manicured lawns and Jeffersonian-type administration buildings topped by a rotunda or bell tower. The remaining buildings are situated in small clusters and include two and three-story "cottages", hospital building, education building, power plant, transitional living residence, farm buildings and recreational areas. A slide presentation including these building features will be prepared to permit the trainee to view the entire prototype institution.

Another characteristic of the prototype institution which must be compatible with the Pennsylvania institutions is the resident population. Pennsylvania institutions range in population from approximately 600 to 3,000 residents. While Pennsylvania is gradually undergoing a reduction in the resident population of its institutions, the typical institutional population remains between one and two thousand residents. With the assumption that institutions with larger populations often generate more problems, or frequently magnify problems which might also exist in smaller institutions, the population of the prototype institution was designed to be approximately 1,700 residents.

Geographic considerations were also included in the selection of the prototype. The majority of Pennsylvania's institutions are situated in a rural agrarian setting. This geographic isolation required the institution to be self-sufficient in the early days. The institutions were forced to provide their own water, sanitation facilities, electricity and the majority of food products. To assure compatibility in its development, a prototype institution had to be found where remnants of these previous activities still exist.

Historical factors were an important aspect in the selection of the prototype institution. An institution which dated back to the mid and late 1800's best typified the Pennsylvania setting. The historical parallel of the prototype and the actual Pennsylvania institutions provided the framework for parallel building development, program changes, and modifications in public acceptance of the mentally retarded.

An institution's physical setting often reflects the organizational structure and the extent of its services to the resident. It was important that the prototype institution share at least similar administrative organization and resident programming.

The Selection Process

The selection process began after the criterion for the prototype institution was established. Visits were made to various institutions outside the state of Pennsylvania. The site visits included institutional tours and interviews with staff.

Most of the institutions visited could have provided the project staff with a suitable prototype setting. It was realized that the most important aspect of the selection process was securing the administration's cooperation in making their institutional resources available. As the project staff needed access to various documents and records, several of the institution's personnel would be needed to assemble information. As a result, the final dimension of the selection process involved appraising the institutional staff and administration's ability and willingness to cooperate with the project staff.

It was the project staff's good fortune to find an institution which met the physical, historical, and organizational criterion established. This institution, which will remain anonymous, demonstrated its willingness and ability to assist in the development of this project.

52.

The selection of the prototype institution is completed. The task of effectively describing the prototype institution commenced and was described in CHAPTER III, Collection of Information.

CHAPTER V

SELECTION OF THE PROTOTYPE COMMUNITY

Rationale for Selection

As the concept of the continuum of care develops, there is an increasing awareness that the institution and the community in which it is located are developing an increasingly cooperative relationship. When institutions for the retarded were viewed as custodial facilities, there was little community involvement. Now that societal pressures for restorative treatment have emerged, the community's role has become an indispensable part of the overall success and effectiveness of the residential institution's program.

To parallel this developing symbiosis between community and institution, the project staff determined that a description of the most salient aspects of a simulated community should also be presented to the trainee. This would permit the trainee to resolve problems and make decisions in the context of both the prototype institution and community. The value of a thorough understanding of the community has been traditionally emphasized by educational administrators. Scott (1968) writes:

"The statement 'Know Your Community' is one often repeated in education. Whether the phrase is expressed in connection with a discussion of educational goals, public relations, administrative functions ...the implication is that knowing the make-up of a community, its various publics, its power structure, its customs and traditions, its hopes, and its history, is essential to successful administration in that particular community."

Factors Influencing the Selection

The selection of a prototype community was particularly important to the development of a reality-based simulator. Several factors were considered by the project staff in selecting a phenotypic community. First, was its compatibility with communities in which Pennsylvania residential institutions for the retarded are located. While size was a significant determinant, the prototype community also needed to satisfy other criterion, such as proximity to a state institution, similar demographic features, and a corresponding social and economic composition.

Second, was the willingness of community leaders to cooperate in the data collection process through both personal interviews and making available public documents. From these sources it was expected that a more intimate understanding of the community structure might be obtained.

Third, was the status and involvement of the residential institution's staff in community affairs. A community environment was sought where an identifiable rapport existed between the community and institution.

Fourth, the single most important factor was the willingness of the prototype community leaders to make a substantial contribution of their resources to facilitate the development of the project.

As there is no "typical" Pennsylvania state school and hospital, there is no "typical" community. Therefore, the attempt was made by the project staff to identify those features within the

community which were deemed to have direct relevance to the instructional "simulation package".

A prototypic community was identified which met the criteria discussed earlier. It, too, will not be identified for reasons previously stated.

CHAPTER VI

DEVELOPMENT OF INSTRUCTIONAL MATERIALS

The purpose of this project focused on the development of a reality-based simulator for pre-service and in-service training of leadership personnel employed in Pennsylvania state schools and hospitals for the retarded. Simulation training attends to the problem of preparing staff personnel to exert more effective leadership roles with regard to the administration of state residential institutions for the mentally retarded. The need to develop effective instructional materials was crucial to the purpose of this project and involved the following steps:

1. Selection of in-basket technique.
2. Selection of the data collection technique.
3. Selection of persons to be interviewed.
4. Field testing of interview technique.
5. Collection of reality-based incidents.
6. Processing of reality-based incidents to in-basket and "live item" format.
7. Classifying and coding of training items.
8. Planning development of community and institution profile.
9. Planning development of instructor training manual.
10. Collection of Pennsylvania statutes and policies.

Selection of the In-Basket Technique

The in-basket technique of instruction was chosen as the vehicle for conveying reality-based incidents and information to the trainee functioning as a leadership person in the simulated prototype institution. In-basket simulated techniques have been previously developed by the University Council for Educational Administration. This technique has been tested and proven to be a valid instructional tool. The in-basket is, when used in this manner, a collection of items which could very likely be on a leadership person's desk in a "normal" day's work. These simulated items may consist of letters, requisitions, telephone messages, notes from the secretary, and any other item common to the leadership person's incoming mail. The in-basket technique was selected because it provides an opportunity for the trainee to engage in problem-solving and decision-making on many and varied incidents under low-risk conditions.

Selection of Data Collection Techniques

The initial dilemma faced by the project staff was to select an appropriate technique of data collection. The project staff's decision to adopt the interview technique of collecting reality-based incidents came only after a careful analysis of the alternative techniques of obtaining this type of information. The alternative was not easy to suggest. Notwithstanding its economic and temporal shortcomings, it was agreed that the interview had these advantages

over the other techniques: (1) It has the potential of yielding salient information not identifiable through analysis of duties and responsibilities; (2) it would control the interview time which the interviewee would need to set aside; (3) it would not restrict the interviewee to forms of response which a questionnaire requires; (4) it meant that responses from a representative sample of leadership positions might be collected; and (5) its flexibility would enable the interviewer to redirect his questioning if first responses did not give clear descriptions of reality-based incidents.

Selection of Persons to be Interviewed

Project staff consideration focused on the problem of the selection of persons to be interviewed. The staff consensus was to choose only top level administrators within each institution. When submitting the interview schedule to each superintendent, it was asked that only department heads, directors, or those in equivalent positions be designated as interviewees. A copy of the letter and interview schedule form sent to each superintendent is shown in Appendix D.

Field Testing of Interview Technique

An interview outline and incident recording forms (see Appendix E and F) were prepared and field tested. The participants consisted of leadership personnel from out-of-state residential institutions for the mentally retarded.

Leadership personnel participating in the field testing of

the interview and incident recording forms were, (1) introduced to the project rationale, (2) provided with an explanation of the concept and use of simulation training, and (3) made aware of the development of the instructional simulation training package. The project staff conducted abbreviated interview sessions. These sessions afforded the project staff the opportunity to try various items. At the conclusion of each interview, the participant was asked to identify the basic problems, weaknesses, and strengths of the interview procedures. The participants were also given the opportunity to make suggestions regarding project design.

The interview outline and incident recording forms were reviewed after field testing. Appropriate revisions to the forms were made on the basis of suggestions obtained from the participants.

Collection of Reality-Based Incidents

Following the brief tryout of the interview procedure, three project staff members embarked on their second on-site visit to the nine Pennsylvania state schools and hospitals for the mentally retarded. At each institution the staff conducted one hour interview sessions with leadership personnel in order to gather reality-based incidents necessary for the generation of both in-basket and "live" items. Collection and recording of the incidents was reported in Chapter III.

Processing of Reality-Based Incidents to In-Basket and "Live" Item Format

Rewriting of the reality-based incidents obtained in the interviews involved the process of transforming the incidents into in-basket and "live item" format. In addition, actual communications provided to the interviewers were edited to insure anonymity of both sender and recipient. Examples of the forms used are included in Appendix F.

Classifying and Coding of In-Basket Items and "Live Items"

No segment of the project proved more difficult than the classifying and coding of the training items. The procedure decided upon was to group the training items into nine major problem categories.

Prior to final ordination, a questionnaire was sent to the nine Pennsylvania superintendents asking them to rank order, by frequency of occurrence, the nine problem categories. (See Appendix I)

A summary of the major divisions and the alpha-numeric coding schema is shown below.

	<u>Alpha Numeric Code</u>
Problems concerning the Medical Staff	MS-1.0
Problems concerning Personnel Management	PM-2.0
Problems concerning the Department Head	DH-3.0
Problems concerning Business and Financial Management	BF-4.0

Alpha
Numeric Code

Problems concerning Physical Plant and Equipment	PE-5.0
Problems concerning Community Relations	CR-6.0
Problems concerning Residents	RE-7.0
Problems concerning Laws, Regulations, Policies	LR-8.0
Problems concerning Nursing Staff	NS-9.0

Planning Development of the Prototype Community and Institution

Concomitant with the project staff's collection of reality-based incidents was the planning for the development of a comprehensive set of community and institution background materials. These materials are being designed to accompany the final simulation training package. It is necessary that the trainee develop an in-depth understanding of the prototype state school and hospital and the community if he is to solve problems and make decisions within the context of the simulator. Much of the value of simulation can be lost if a thorough analysis of the community and institution is not incorporated with the "live" and in-basket training items.

The following are the components of background information being prepared for inclusion in the final training package. The background information which will be presented both verbally and pictorially to the trainee, includes:

I. Community Profile

- A. Survey of community resources (e.g., educational religious services, agencies, recreational opportunities, civic organizations).
- B. Special written reports on the historical, geographical, political, sociological, economic, and other salient aspects of the community.
- C. Film strips and audio tapes presenting information on the community environment.
- D. A listing of community problems.

II. Institutional Profile

- A. History of the institution.
- B. A written statement of the philosophy and objectives of the institution.
- C. Audio and video taped recordings presenting information about persons, conditions, and forces effecting administration in the simulated institution.
- D. Enumeration of institutional problems.

Planning Development of Instructor's Training Manual

Any simulation exercise depends upon the competence of the instructor (Wynn, 1964). It is essential that the instructor be facile in simulation's applicability and use. Cognizant of the importance of familiarizing the instructor with the techniques of

63.

simulation, a training manual will be prepared to set forth guidelines and procedures for using the simulation training package.

Collection of Pennsylvania Statutes and Policy

An addendum to the contents of the simulation training package will be the Pennsylvania State Laws and Regulations pertaining to Mental Health and Mental Retardation. A listing of the Pennsylvania Department of Public Welfare directives will also be included in the simulation training package.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Summary

The University of Pittsburgh, with cooperation and funding through the Department of Public Welfare, Office of Mental Retardation, Commonwealth of Pennsylvania, assumed the task of developing a reality-based simulator and training materials. The simulator and training materials are intended to be one component of pre-service and in-service training programs provided for persons in leadership positions in the Commonwealth's state schools and hospitals for the mentally retarded.

This project, entitled, "Development of In-Service Programs for Leadership Personnel in Residential Institutions for the Mentally Retarded", had the following objectives:

1. To review literature relevant to simulation and its application for training leadership personnel.
2. To identify the responsibilities and problems of institutional leadership personnel.
3. To collect information relevant to the description, management, and problems of institutional leadership personnel.
4. To design and develop a reality-based simulator with appropriate training materials.

5. To develop pre-service and in-service training exercises to implement the simulator.
6. To assess the reliability of the simulator through pilot investigations.

In accomplishing Objective One, the project staff reviewed more than sixty articles related to simulation and its application for training leadership personnel. The literature supports the instructional use of simulation as being effective for training and possessing far more capabilities than limitations. Coinciding with the review of literature was the feasibility study conducted by the project staff. From the feasibility study it was discerned that a reality-based simulator could be developed and used for training leadership personnel employed in state schools and hospitals for the mentally retarded.

Completion of Objective Two entailed site visits, consultations, and personal interviews which assisted the project staff in identifying many of the responsibilities and problems of leadership personnel. The responsibilities were extracted from both job descriptions and interviews with leadership personnel. The problems identified were categorized as follows:

1. Problems concerning the Medical Staff: Organization and Administration of matters directly relating to Medical Staff.
2. Problems concerning Personnel Management: Employee matters in general.

3. Problems concerning the Department Head: Departmental and inter-departmental matters.
4. Problems concerning Business and Financial Management:
 - a. Budgeting
 - b. Bookkeeping
 - c. Accounting
5. Problems concerning Physical Plant and Equipment:
Physical facilities including both plant and equipment.
6. Problems concerning Community Relations: Community interaction (general and inter-agency).
7. Problems concerning Patients: Matters relating directly to resident care.
8. Problems concerning Laws, Regulations, Policies:
Matters relating to institutional, state and federal statutes.
9. Problems concerning Nursing Staff: Matters relating to nursing services (including both professional and para-professional staff).

Objective Three was completed by collecting information relevant to the description, management, and problems of institutions. Information concerning description and management was collected through an analysis of institutional documents such as policy handbooks, law manuals, regulations, annual reports, and program descriptions. Problems encountered by institutions were, (1) extracted from a review of professional literature (NMD, 1964; PCMR, 1968; PARC, 1968; Blatt and Kaplan, 1956); and (2) acquired via interviews with

leadership personnel from Pennsylvania and other states.

Objective Four is in its final stage of completion. The reality-based simulator has been designed. Information needed to describe the prototype institution and community has been collected, collated, and sequenced for writing their respective descriptions. A photographer is assembling color slides for the pictorial presentation of both prototypes.

The project staff interviewed 155 persons in leadership positions in Pennsylvania state schools and hospitals for the mentally retarded. From these interviews over 450 reality-based incidents were gathered. The reality-based incidents are being processed into in-basket and "live" item format. The in-basket and "live" items are designed to facilitate problem-solving and decision-making in direct relation to the problems encountered by leadership personnel in state schools and hospitals for the mentally retarded.

Objective Five, the development of pre-service and in-service training exercises to implement the simulator, is in the planning stage. The development of training packets containing training items reflecting the nine previously stated problem categories will begin after all of the reality-based incidents are processed into an in-basket and "live" item format. The completion of this task will allow the project staff to formulate specific training exercises in problem areas involving medical staff, personnel management, business and finance, physical plant and equipment, residents, laws and regulations, and others.

Objective Six, the assessment of the reliability of the simulator through pilot investigations, will be completed as part of the project beginning September 1, 1970, entitled, "Pilot Workshops Utilizing the Simulator and Training Materials Developed for In-Service Programs for Leadership Personnel Employed in Residential Institutions for the Mentally Retarded." The purposes of this project are, (1) to conduct a minimum of three pilot workshops incorporating the simulator and training materials developed for leadership personnel of residential institutions for the mentally retarded, and (2) to revise and refine the material following each workshop. Participants in the pilot workshops will include superintendents of state institutions for the mentally retarded, representatives from the Pennsylvania Department of Public Welfare, Office of Mental Retardation, administrators representing institutions for the mentally retarded throughout the United States, and noted authorities in the instructional use of simulation. Following each workshop, conferences with the participants will be held to, (1) ascertain the necessary revisions for the newly developed simulator, (2) assess the reliability of the simulator, and (3) evaluate the validity of the simulator in-basket items to discern their effectiveness for training in problem-solving and decision-making.

Conclusions

Simulation has been used as a training device by the military, business, industry, medicine, education and the behavioral sciences.

The project staff, as a result of the activities which have occurred with this project, believe that simulation can be used effectively for both pre-service and in-service training programs for leadership personnel employed in Pennsylvania state schools and hospitals for the mentally retarded. A reality-based simulator and training materials are in the process of being completed. The training materials are being designed to engage leadership persons [trainees] in problem-solving and decision-making activities congruent with problems encountered in institutions for the mentally retarded.

The simulator and training materials being developed provide a vehicle for experimentation and research that can produce innovations and meaningful changes in the management of real institutions for the retarded. The Office of Mental Retardation, Commonwealth of Pennsylvania, by supporting this project, has demonstrated its willingness to effect productive change and improve the quality of services for the mentally retarded.

BIBLIOGRAPHY

American Association on Mental Deficiency. Standards for State Residential Care. Columbus, Ohio: American Association on Mental Deficiency, 1964.

American Association of School Administrators. Professional Administrators for America's Schools. Thirty-Eighth Yearbook. Washington, D.C.: American Association of School Administrators, 1960.

Baker, F. B. "Use of Computers in Educational Research." Review of Educational Research, 33 (1963), 566-78.

Blatt, Burton, and Kaplan, Fred. Christmas in Purgatory: A Photographic Essay on Mental Retardation. Boston, Mass.: Black Star Publications, 1966.

Boocock, Sarane S. "An Experimental Study of the Learning Effects of Two Games with Simulated Environments." The American Behavioral Scientist, 10 (October, 1966), 8-18.

Boocock, Sarane S., and Schild, E. O. Simulation Games in Learning. Beverly Hills: Sage Publications, Inc., 1968.

Broadbent, Frank W. "Simulating Problems of Beginning Teachers." The Elementary School Journal, 68 (October, 1967), 39-43.

Bushnell, D. D., ed. The Automation of School Information Systems. Washington, D. C.: Department of Audio-Visual Instruction, NEA, 1964.

Cherryholmes, Cleo H. "Some Current Research on Effectiveness of Educational Simulations: Implications for Alternative Strategies." The American Behavioral Scientist, 10 (October, 1966), 4-7.

Churchman, C. West. The Systems Approach. New York: Dell Publishing Co., Inc., 1968.

Cohen, Kalman J., et.al. The Carnegie Tech Management Game: An Experiment in Business Education. Homewood, Illinois: Richard D. Irwin, Inc., 1964.

Coleman, James S. "Analysis of Social Structures and Simulation of Social Process with Electronic Computers." Educational and Psychological Measurement, 21 (1961), 203-18.

Cunningham, Luvern. Three Uses of Simulation: In-Service Workshop in Field, Three-Week Workshop on Campus, and Informal Course Work. Tape Recording Number 5; UCEA Recordings on Preparations in Preparatory Programs, 1961.

Eckman, D. P., ed. Systems: Research and Design. New York: John Wiley & Sons, 1951.

Feigenbaum, E. A., and Feldman, J., ed. Computers and Thought. New York: McGraw-Hill, 1963.

Greenberger, M. Management and the Computer of the Future. MIT Press and John Wiley & Sons, 1962.

Greenlaw, P. S.; Herron, L. W.; and Rawson, R. H. Business Simulation in Industrial and University Education. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1962.

Griffiths, Daniel E. Administrative Theory. New York: Appleton-Century Crofts, 1959.

Guetzkow, Harold S., et.al. Simulation in International Relations: Developments for Research and Teaching. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.

Hartman, B. O., and McKenzie, R. E. The Complex Behavior Simulator: A Device for Studying Psychologic Problems in Modern Weapons Systems. USAF School of Aviation: Medical Department, 1960, No. 61-9.

Hemphill, John K.; Griffiths, Daniel E.; and Frederiksen, Norman. Administrative Performance and Personality: A Study of the Principal in a Simulated Elementary School. New York: Bureau of Publications, Teachers College, Columbia University, 1962.

Hoggatt, Austin C., and Balderston, F. E. Symposium on Simulation Models: Methods and Applications to the Behavioral Sciences. Cincinnati: South-Western Publishing Co., 1963.

Hovater, A. K.; Denholm, D. H.; and Smith, L. A. "Industrial Engineering in Vocational Rehabilitation." Rehabilitation Literature, 30 (November, 1969), 322-5.

Immegart, C. The Use of Simulated Materials in Eight Universities. Columbus, Ohio: University Council for Educational Administration, 1962. (Mimeo graphed.)

Kersh, Bert Y. "The Classroom Simulator: An Audiovisual Environment for Practice Teaching." Audiovisual Instruction. 6 (November, 1961), 447-8.

Laughery, K. R., and Gregg, L. W. "Simulation of Human Problem-Solving Behavior." Psychometrika, 27 (1962), 265-82.

Martin, E. W., Jr., and Hall, D. J. "Data Processing: Automation in Calculation." Review of Educational Research, 30 (1960), 522-35.

McGuire, Christine H., and Babbott, David. "Simulation Technique in the Measurement of Problem-Solving Skills." Journal of Educational Measurement, 4 (Spring, 1967), 1-10.

McKean, R. W. Efficiency in Government Through Systems Analysis. New York: John Wiley & Sons, 1961.

McNulty, C. F. Simulation Techniques for Spacecrew Training: State and the Art Review. USAF MRL, 1962, No. 62-32.

McPhee, William N. Formal Theories of Mass Behavior. New York: The Free Press of Glencoe, 1963.

Monroe, Bruce. "Some Dimensions of Simulation." Seal Beach, California: Instructional Systems Group, 1969.

Muckler, F. A., et.al. Transfer of Training with Simulated Aircraft Dynamics: I. Variations in Period and Damping of the Phygoid Response. USAF Wright Air Development Center, 1961 No. 60-615. (Part 1).

Newell, Allan, and Simon, Herbert A. "The Simulation of Human Thought." Current Trends in Psychological Theory. Pittsburgh: University of Pittsburgh Press, 1961.

Noel, Robert C. "The POLIS Laboratory." The American Behavioral Scientist, 12 (July-August, 1969), 31-5.

O'Neill, Lawrence P. Development of In-Service Programs for Leadership Personnel in Residential Institutions for the Mentally Retarded. Report prepared for the Department of Public Welfare, Office of Mental Retardation, Harrisburg, Pennsylvania, 1969 (Mimeo graphed).

Pennsylvania Association for Retarded Children. A Plan for Cooperative State Action. Harrisburg, Pennsylvania: Pennsylvania Association for Retarded Children, Inc., 1968.

President's Committee on Mental Retardation. MR 68: The Edge of Change. Washington, D. C.: U. S. Government Printing Office, 1968.

Pool, Ithiel de Sola, and Abelson Robert. "The Simulmatics Project." Public Opinion Quarterly, 25 (1961), 167-83.

Rice, Arthur H. "Educators Will Hear a Lot About Simulation Techniques." Nation's Schools, 78 (October, 1966), 10-12.

Rome, Sydney C., and Rome Beatrice K. "The Leviathan Technique for Large-Group Analysis." Behavioral Science, 5 (1961), 148-52.

Sage, Daniel D. S.E.A.T.S. GAME Instructor's Manual. Division of Special Education and Rehabilitation, Syracuse University, 1969.

Scott, Norton M. "Know your Community in Ten Easy Lessons." The Clearing House 43 (September, 1968), 55-7.

Seibel, R. "Computer Solutions to Some Non-Computational Problems." Educational and Psychological Measurement, 21 (1961), 185-201.

Siegel, Arthur I.; Wolf, J. J.; and Lantzman, R. S. Techniques for Evaluating Operator Loading in Man Machine Systems: Further Test and Evaluation of a Man Machine Simulation Model. Wayne, Pennsylvania: Applied Psychological Services, 1963.

Siegel, Arthur I., et.al. Digital Simulation of Submarine Crew Performance: I. Logic of a Psychological "Model" for Digitally Simulating Crew Performance. Wayne, Pennsylvania: Applied Psychological Services, 1964.

Steinemann, J. H. Comparison of Performance of Analogue Simulated and Actual Troubleshooting Tasks. USN PRA, 1966, No. SRM 67-1 v11.

Thomas, L. Jean, ed. A Bibliography of Reports Issued by the Behavioral Sciences Laboratory: Emergency Psychology, Training Psychology, Environmental Stress, Simulation Techniques, and Physical Anthropology. Wright-Patterson Air Force Base, Ohio: 6570th Aerospace Medical Research Laboratories, Behavioral Sciences Laboratory, 1962.

University Council for Educational Administration. The Instructional Uses of Simulation in the Preparation of School Administrators. Columbus, Ohio: University Council for Educational Administration, 1961.

Utsay, Jordan; Wallen, Carl; and Baldin, H. O. "Simulation: A Breakthrough in the Education of Reading Teachers." Phi Delta Kappan 47 (June, 1966), 572-4.

Vanenbergen, S. G.; Green, B. F.; and Wrigley, C. F. "A Survey of Computer Usage in Departments of Psychology and Sociology." Behavioral Science, 7 (1962), 108-11.

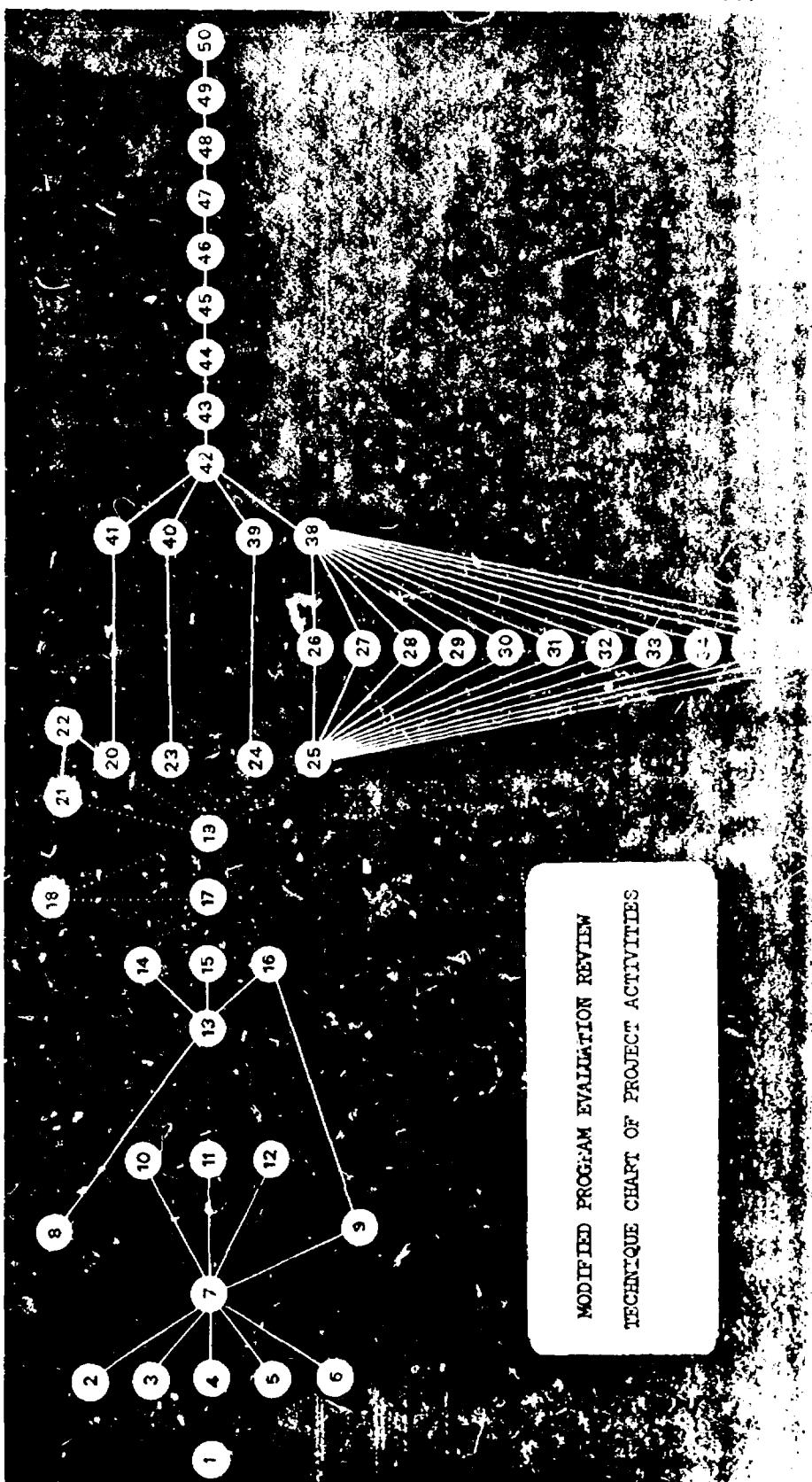
Webster's Seventh New Collegiate Dictionary. Springfield, Massachusetts: G. & C. Merriam Company, Publishers, 1969.

Wynn, Richard. "Simulation: Terrible Reality in the Preparation of School Administrators." Phi Delta Kappan, 46 (December, 1964), 170-73.

Yasaki, E. "Educational Data Processing." Datamation, 9 (1963), 24-7.

APPENDICES

APPENDIX:	PAGE
A. PERT Chart of Project Events	76
B. Event Identification List	77
C. Request for Information from Out-of-State Institutions ..	79
D. Letter Explaining Interview Visit, Project Description, and Interview Schedule	80
E. Interview Outline	84
F. Incident Recording Forms	86
G. Position Titles of Leadership Personnel Interviewed	92
H. Roster of Personnel Interviewed	95
I. Administrative Problem Questionnaire	100
J. Project Consultants	101
K. Profile of the Prototype Community	103
L. Profile of the Prototype Institution	106



EVENT IDENTIFICATION

1. Project Start
2. Review Previously Acquired Materials
3. Review of Simulation Literature
4. Obtain Standards of Operations for State Institutions
(Classification System) AAMD
5. Procure NARC Films
6. Select Consultants
7. Complete Review of Acquired Materials and Simulation Literature
8. Procure Secretary
9. Plan Itinerary for On-Site Visitations of Institutions
10. Prepare Statement of Project Rationale
11. Prepare Statement of Project Purpose and Objective
12. Conference with Pennsylvania Superintendents
13. Begin Selection of Institution and Community Prototype
14. Select Institution for Prototype
15. Select Community for Prototype
16. On-Site Visitations to Prototype and Other Institutions to
Collect Information
17. First Conference with Consultants
18. Enter Graduate Student Assistant
19. Begin Development of Training Materials
20. Begin Development of In-Basket Items
21. Begin Development Other than Written In-Basket Items (phone,
photo, tape, film loop)
22. Begin Development of In-Basket Evaluation Criteria
23. Begin Development of Evaluation Criteria for Trainee Performance
24. Begin A-V Presentation (slides, tapes, etc.)
25. Develop Institutional Background Material
26. Prepare Institution Staff Roster
27. Prepare Budget (Biannual) Line and PPBS
28. Description of Supportive Services
29. Description of Local Association for the Retarded
30. Description of Community (written)
31. Develop Configuration of Political Subdivisions
32. Create Commission of State Institution
33. Develop State Laws and Regulations
34. Develop Diagnostic Center
35. Develop Policy Handbook for State
36. Develop Policy Handbook for Institution
37. Develop Training Manual
38. Completion of Background Material
39. Completion of A-V Materials
40. Completion of Evaluation Criteria for Trainee Performance
41. Completion of In-Basket Evaluation
42. Conference with Consultants #2

APPENDIX B (Cont'd.)

78.

43. Completion of Training Materials
44. Conference with Consultants #3
45. Print Sample Materials
46. Regional Workshop Tryout #1
47. Material Evaluation and Revision
48. Print Materials
49. Regional Workshop #2
50. Project Complete

APPENDIX C

79.



SCHOOL OF EDUCATION
UNIVERSITY OF PITTSBURGH
PITTSBURGH, PENNSYLVANIA 15213

DEPARTMENT OF SPECIAL EDUCATION AND REHABILITATION

May 1970

Dear

The Department of Special Education, University of Pittsburgh, in cooperation with the Pennsylvania Office of Mental Retardation, is presently developing reality-based simulation materials for the in-service training of leadership personnel in residential institutions for the mentally retarded.

To facilitate the development of the training materials, it is necessary to secure a broad base of information on the following functions generally involved in institutional management:

- (1) Resident care
- (2) Clinical and social services
- (3) Education and habilitation
- (4) Staff personnel

You could assist us in this effort by forwarding any information regarding your institution's policies, procedures, and regulations encompassing the aforementioned areas. In addition, I would appreciate your forwarding copies of these state laws and policies regulating admission of the mentally retarded to your public supported residential institutions.

Thank you for your interest, and I would appreciate hearing from you at your earliest convenience.

Sincerely,

William E. Garove
Senior Research Associate

WEG:sp



SCHOOL OF EDUCATION
UNIVERSITY OF PITTSBURGH
PITTSBURGH, PENNSYLVANIA 15213

DEPARTMENT OF SPECIAL EDUCATION AND REHABILITATION

June 16, 1970

Dear

It was a pleasure meeting you for the purpose of discussing the institutional Simulation Development Project. As I mentioned to you in our initial meeting the next critical event in the project would be a return visit to interview leadership personnel on your staff for the purpose of accumulating a corpus of incidents to be used in training. The incidents, as you may recall, will be transcribed in the form of "in-basket" items to be used as the vehicle for training in decision-making as it relates to the management of institutions for the mentally retarded.

Our itinerary for visiting the institutions will take us from the Western to the Eastern sections of the state. The most convenient date for the three project staff members, (Mr. Garove, Mr. Handley, and Mr. Woods) to be at the Western State School and Hospital is June 29, 1970. If these dates are not acceptable, please call me at (412) 621-3500, Extension 6408 or 6409.

Please schedule interviews with the following personnel or their counterparts.

- A. Superintendent
- B. Assistant Superintendent
- C. Division Directors:
 - 1. Business Management
 - 2. Personnel
 - 3. Education
 - 4. Research
 - 5. Hospital
 - 6. Program Services
 - 7. Nursing
- D. Unit or Ward Directors

APPENDIX D (Cont'd.)

81.

June 16, 1970
Continued - Page 2

We will be able to interview a total of 18 staff members during our visit.

Attached is an interview schedule requiring the submission of the name and position of each interviewee. Three interviews will be conducted simultaneously each hour.

If you have any questions regarding procedures, scheduling, etc., please call Mr. Handley, Mr. Woods, or me.

Thank you for your receptiveness at our initial meeting, and along with members of the project staff, I'll be looking forward to the next visit.

Sincerely,

William E. Garove
Senior Research Associate

WEG/sp

Enclosures

APPENDIX D (Cont'd.)

82.

INTERVIEW SCHEDULE

Date _____ Institution _____

<u>Time</u>	<u>Interviewer</u>	<u>Name</u>	<u>Position</u>
9:00 -	#1		
9:50	#2		
	#3		
10:00 -	#1		
10:50	#2		
	#3		
11:00 -	#1		
11:50	#2		
	#3		
1:00 -	#1		
1:50	#2		
	#3		
2:00 -	#1		
2:50	#2		
	#3		
3:00 -	#1		
3:50	#2		
	#3		

**DEVELOPMENT OF IN-SERVICE PROGRAMS FOR LEADERSHIP PERSONNEL EMPLOYED
IN RESIDENTIAL INSTITUTIONS FOR THE MENTALLY RETARDED**

The Office of Mental Retardation, in cooperation with the University of Pittsburgh, is now in the process of developing a program for the training of leadership personnel in institutions for the mentally retarded in Pennsylvania. Applying the concept of simulation, the project staff will be describing a prototype institution which is representative of institutions in Pennsylvania. Participants in the completed training program will then gain administrative experience by "running" this simulated institution for various periods of time and in various management capacities.

In order to develop a reality-based simulated institution, it is important that the project staff collect numerous problems and incidences that occur as a part of the everyday operations of these institutions. You have been asked to help collect this information by participating in a 50-minute interview in which you will be asked to identify your individual activities including problems which you frequently encounter. The types of problems or incidents the interviewer is trying to collect are those you believe persons being trained for positions such as yours should have experience in managing, prior to entering the job.

The interview will be anonymous in nature and none of the information collected will be associated with any particular individual or institution.

INTERVIEW OUTLINE

NAME _____ POSITION _____

1. Introduction

"Hello, my name is _____ from the University of Pittsburgh.

2. Project Concept

"I have requested that you meet with me today in order that you might assist our staff in developing a training device for leadership personnel in the nine state institutions for the mentally retarded. The Office of Mental Retardation has asked us to design a simulated state institution which has all the characteristics of Pennsylvania institutions for the mentally retarded. Trainees in the program will gain experience and knowledge by running the simulated institution.

In order to make this simulated institution represent a real institution, we are interviewing leadership personnel in the nine state institutions to collect information about their jobs. We need to know what problems you handle daily so that we can train others for positions such as yours."

3. Anonymity

"None of the information we collect or the things we discuss today will be connected with any institution or individual."

4. Questions

"I'd like to begin by asking you a few questions about your particular position."

a. Briefly describe a typical day's activities.

b. What means of communication do you use most frequently?
Least frequently?

Memo	Letter	Telephone	Face-to-Face
ML	ML	ML	ML

- c. With what other individual in a leadership capacity do you have the most contact?
- d. To whom do you go most frequently to get answers to questions concerning your duties?
- e. What skills or abilities should an individual applying for a job such as yours possess?

5. Collection of items (use "b" above for clue to mode)

Describe a typical:

- Telephone conversation received.
- Letter received.
- Face-to-face encounter.
- Memo received.
- Observed situation.

6. Conclusion

"You have been most helpful. I appreciate the time you have given me today. Thank you very much."

APPENDIX F

86.

LETTER FORM

SENDER: _____

RECIPIENT: _____

CONTENT: _____

NAME _____

POSITION _____

APPENDIX F (Cont'd.)

87.

TELEPHONE CONVERSATION

TO: _____ Position _____
FROM: _____ Position _____

ESSENCE OF CONVERSATION:

APPENDIX F (Cont'd.)

88.

MESSAGE FOR	
<u>name</u>	<u>position</u>
<u>Date</u>	<u>Time</u>
WHILE YOU WERE OUT	
<u>Mr.</u>	
<u>of</u>	
<u>Phone No.</u>	
<u>Phoned</u>	<u>Please call.</u>
<u>Called to see you.</u>	<u>Will call again.</u>
<u>Wants to see you.</u>	<u>Rush.</u>

APPENDIX F (Cont'd.)

89.

PERSONAL ENCOUNTERS "Live Items"

SUBJECT:

Name _____ Position _____

Participant(s):

Name _____ Position _____

Name _____ Position _____

Name _____ Position _____

ESSENCE OF ENCOUNTER:

APPENDIX F (Cont'd.)

90.

OFFICE MEMO

TO:
FROM:
DATE:
SUBJECT:

APPENDIX F (Cont'd.)

91.

VIDEO TAPE INCIDENTS

OBSEVER(S):

Name _____	Position _____
Name _____	Position _____
Name _____	Position _____

SUBJECT(S) OBSERVED:

Name	Position
Name	Position
Name	Position

ESSENCE OF INCIDENT:

APPENDIX G

92.

POSITION TITLES OF LEADERSHIP PERSONNEL INTERVIEWED

<u>Position</u>	<u>Number</u>
Superintendent	5
Acting Superintendent	1
Director	1
Assistant Superintendent	2
Assistant Director	1
Assistant Superintendent for Administration	1
Assistant Hospital Director for Administration	1
Business Manager	5
Purchasing Agent	2
Accountant	2
Accounting Assistant	1
Personnel Officer	7
Director of Personnel	1
Personnel Director	1
Psychiatric Nurse Director	1
Psychiatric Nurse Instructor	2
Psychiatric Nurse V	1
Psychiatric Nurse IV	1
Psychiatric Nurse II	5
Psychiatric Nurse I	2
School Principal	4
Director of Educational Activities	1
Director of Education	1
Assistant Hospital Director for Education	1
Teacher	2
Director of Nursing Services	1
Assistant Director of Nursing	2
Hospital Director	1
Clinical Director	3
Medical Director	2
Assistant Hospital Director for Clinical Services	1
Physical Therapist	1

APPENDIX G (Cont'd.)

93.

<u>Position</u>	<u>Number</u>
Director of Patient Activities	1
Director of Activities Department	1
Director of Recreation	1
Director of Recreation Department	1
Director of Recreation and Volunteer Services	1
Responsibility Coordinator	1
Assistant Director of Program Services	1
Assistant Director of Support Services	1
Director of Psychology	2
Chief of Psychological Services	2
Psychologist	4
Psychological Services Associate III	1
Director of Social Services	5
Assistant Director of Social Services	1
Social Worker II	1
Supervising Nurse	7
Charge Nurse	12
Nurse	2
Therapeutic Activities Worker IV	1
Therapeutic Activities Worker III	2
Therapeutic Activities Worker II	1
Director of Occupational Therapy	3
Director of Vocational Training	1
Director of Vocational Adjustment Services	1
Youth Development Center Director	1
Assistant Superintendent for Rehabilitative Services	1
Occupational Therapist	1
Director of H.I.P. Program	1
In-Service Education Director	1
Director of Education and Training	1
Director of Research and Education	1
In-Service Education Instructor	1
Institutional Maintenance Superintendent	1
Building Maintenance Foreman	1
Plant Maintenance Engineer	1
Facilities Manager	2
Superintendent's Secretary	1

APPENDIX C (Cont'd.)

94.

<u>Position</u>	<u>Number</u>
Speech Pathologist	1
Director of Speech and Hearing	1
Speech Therapist	1
Unit Director	8
Building Supervisor	3
Volunteer Resources Coordinator	1
Dietician	1
Dentist	1
Transportation	1
Total Personnel Interviewed	155

ROSTER OF PERSONNEL INTERVIEWEDWHITE HAVEN STATE SCHOOL
AND HOSPITALHAMBURG STATE SCHOOL
AND HOSPITAL

Superintendent	Personnel Officer
Assistant Superintendent	Business Manager
Chief Nurse	Clinical Director
Business Manager	Institutional School Principal
Personnel Officer	Director of Social Service
Assistant Chief Nurse	Superintendent
School Principal	Psychologist
Director, Social Services	Nurse
Shift Supervisor	Occupational Therapist
Director, Vocational Adjustment Services	Volunteer Resources Coordinator
Chief, Psychology Service	Speech Therapist
Charge Nurse	Purchasing Agent
Speech Pathologist	Dietician
Charge Nurse	In-Service Education Instructor
Charge Nurse	Plant Maintenance Engineer
Charge Nurse	Director of Activities Department
Charge Nurse	Director, Nursing Service
Charge Nurse	Accounting Assistant

ROSTER OF PERSONNEL INTERVIEWEDLAURELTON STATE SCHOOL
AND HOSPITALAssistant Superintendent of
AdministrationAssistant Superintendent for
Rehabilitative Services

Director of Nursing

Director of Psychology

Director of Occupational Therapy

Director of Recreation

Accountant

Director, Vocational Training

Director, Social Services

Responsibility Coordinator

School Principal

Co-Director H.I.P. Program

Building Maintenance Foreman

Farm Manager

Medical Director

Personnel Officer

Superintendent's Secretary

Superintendent

SELINSGROVE STATE SCHOOL
AND HOSPITAL

Superintendent

Psychiatric Nurse Instructor

Personnel Officer

Day Supervisor Nurse

Director of Education & Training

Assistant Director of Nursing
and Nursing Instructor

Business Manager

Supervisor, Nurse, D-Group

Supervisor Nurse, Hospital

Clinical Director

Supervisory Nurse, J. Geriatric
UnitsSupervisor Nurse, C. F. & C. M.
Pediatric Hospital

ROSTER OF PERSONNEL INTERVIEWEDPENNHURST STATE SCHOOL
AND HOSPITAL

Director of Social Service	Directress of Nursing
Director of Nursing	Business Manager
Assistant Director for Support Services	Institutional Maintenance Superintendent
Director of Research and Education	Building Supervisor
Medical Director	Building Supervisor
Director of Education	Building Supervisor
Acting Superintendent	Superintendent
Director of Personnel	Assistant Superintendent
Director of Psychology	Chief of Psychological Services
Assistant Director for Program Services	Director of Educational Activities
Director of Unit I	Director, Speech & Hearing
Director of Unit II	Personnel Officer
Director of Unit III	Director of Social Service
Director of Unit IV	Director of Occupational Therapy
Director of Unit V	Psychologist (Research)
Director of Unit VI	Psychologist (Research)
Director of Unit VII	Director of Recreation and Volunteers
Director of Unit VIII	

ROSTER OF PERSONNEL INTERVIEWEDWESTERN STATE SCHOOL
AND HOSPITAL

Director	Psychiatric Nurse V
Assistant Director	Therapeutic Activity Worker (Recreation)
Assistant Hospital Director for Clinical Services	Psychiatric Nurse I
Assistant Hospital Director for Administration	Personnel Officer I
Personnel Director	Therapeutic Activity Worker IV (General)
Psychology Department	Therapeutic Activity Worker III (Recreation)
Nursing Department	Psychiatric Nursing Director I
Assistant Director/Social Service	Youth Development Center Director II
Dental Service	Psychiatric Nurse IV
Nursing Director	Psychiatric Nurse II
Transportation	Psychiatric Nurse II
Occupational Therapy	Psychiatric Nurse II
Recreation Department Director	Psychiatric Nurse II
Assistant Hospital Director Education Department	Therapeutic Activity Worker III (General)
Education	Purchasing Agent II
	Accountant I
	Psychiatric Nurse I
	Psychiatric Nurse II

ROSTER OF PERSONNEL INTERVIEWED

**EBENSBURG STATE SCHOOL
AND HOSPITAL**

Institutional Business Manager

Personnel Officer

Psychiatric Nurse Instructor II

School Principal

Special Education Teacher II

Director of Nursing Service

Hospital Director

Clinical Director

Physical Therapist IV

Director of Patient Activities

Psychiatric Services Associate III

Social Worker II

APPENDIX I

100.

Number in rank order (1 through 9), by frequency of occurrence, the following categories of administrative problems:

- ____ Problems concerning the Medical Staff: Organization and Administration of matters directly relating to Medical Staff.
- ____ Problems concerning Personnel Management: Employee matters in general.
- ____ Problems concerning the Department Head: Departmental and inter-departmental matters.
- ____ Problems concerning Business and Financial Management:
 1. Budgeting
 2. Bookkeeping
 3. Accounting
- ____ Problems concerning Physical Plant and Equipment: Physical facilities including both plant and equipment
- ____ Problems concerning Community Relations: Community interaction (general and inter-agency).
- ____ Problems concerning Patients: Matters relating directly to resident care.
- ____ Problems concerning Laws, Regulations, Policies: Matters relating to institutional, state and federal statutes.
- ____ Problems concerning Nursing Staff: Matters relating to nursing services (including both professional and para-professional staff).

State School and Hospital

APPENDIX J

101.

PROJECT CONSULTANTS

<u>NAME AND POSITION</u>	<u>LOCATION</u>
Louis Belinson, M.D. Superintendent, Lincoln State School	Lincoln, Illinois
Julius S. Cohen, Ed.D. Associate Director, Institute for the Study of Mental Retardation	University of Michigan Ann Arbor, Michigan
H. Carl Haywood, Ph.D. Director, Institute on Mental Retardation & Intellectual Development	George Peabody College Nashville, Tennessee
Joseph Hubbard, Ph.D. Director, Community Mental Retardation Program and Service	Tempe, Arizona
Mr. Charles Kennedy Chief Hospital Administrator, Columbus State Institute and Clinic	Columbus, Ohio
John W. Kidd, Ed.D. Assistant Superintendent, Department for Mentally Retarded	Special School District St. Louis, Missouri
U. K. Moore, Ph.D. Professor of Social Psychology	University of Pittsburgh Pittsburgh, Pennsylvania
Mr. Arthur Nelson Superintendent, Northern Wisconsin Colony and Training School	Chippewa Falls, Wisconsin
R. C. Scheerenberger, Ph.D. Superintendent, Central Wisconsin Colony & Training School	Madison, Wisconsin
William Sloan, Ph.D. Director, Division of Mental Retardation Services	Department of Mental Health Springfield, Illinois

APPENDIX J (Cont'd.)

102.

PROJECT CONSULTANTS

NAME AND POSITION

LOCATION

Mr. Harvey A. Stevens
Director,
Bureau for Mental Retardation

Madison, Wisconsin

Richard D. Wynn, Ed.D.
Chairman, Department of
Educational Administration

University of Pittsburgh
Pittsburgh, Pennsylvania

PROFILE OF THE PROTOTYPE COMMUNITY

- I. Historical Information
 - A. Established (year)
 - B. First Settlers
 - C. Location
 - D. Population
 - E. Land Area
 - F. Etc.
- II. Industries
 - A. Number
 - B. Kind
 - C. Etc.
- III. Community Organization, Agencies and Institutions
 - A. Churches
 - B. Institutions
 - C. Clubs
 - D. Civic Organization
 - E. Library
 - F. Etc.
- IV. Local Government and Related Services
 - A. Manager
 - B. City Council
 - C. Police Department
 - D. Fire Department
 - E. Etc.
- V. Recreation
 - A. Community Parks
 - B. Athletic Teams
 - C. Swimming Pools
 - D. Private Clubs
 - E. Golf Courses
 - F. Etc.
- VI. "Vital" Statistics
 - A. Population (latest estimates)
 - B. Area of City (square miles)
 - C. Number of miles of paved streets
 - D. Type of Government (System)
 - E. City Tax Rate (mills)
 - F. County Tax Rate (mills)
 - G. School Tax Rate (mills)
 - H. Total Taxes (mills)

APPENDIX K (Cont'd.)

104.

- I. Assessed Valuation
- J. Number of Public Parks and Recreation Areas
- K. Wage Tax Collection (per cent) (amount)
- L. Number of Wage Tax Payers
- M. Sewage Treatment System
- N. Number of Paid Policemen
- O. Number of Auxiliary Policemen
- P. Number of Volunteer Firemen
- Q. Official City Agencies
 - 1. Water Authority
 - 2. Planning Commission
 - 3. Etc.
- R. Number of Persons Employed in Local Industry
- S. Name of all Industries and Number Employed in Each Industry
- T. Number of Retail Businesses
- U. Membership of Chamber of Commerce
- V. Per capita Income of Residents

VII. Educational Information

- A. Number of Public Schools
 - 1. Grades
 - 2. Number of Pupils
 - 3. Number of Administrative and Supervisory Personnel
 - 4. Number of Teachers
 - 5. Enrollment Distribution by Grades

Grades K-6
Grades K-9
Grade 10
Grade 11
Grade 12
Total number of students

- B. Number of Parochial Schools
 - 1. Grades
 - 2. Number of Pupils
 - 3. Number of Administrative and Supervisory Personnel
 - 4. Number of Teachers
 - 5. Enrollment Distribution by Grades

Grades K-6
Grades 7-9
Grade 10
Grade 11
Grade 12
Total number of students

VIII. Geographic Information

- A. Maps
- B. Charts
- C. Pictures

IX. Problems of the Community

- A. Traffic and Parking
- B. Urban Renewal
- C. Pollution
- D. Etc.

PROFILE OF THE PROTOTYPE INSTITUTION

I. Historical Information

- A. Established
- B. First Residents
- C. Location
- D. Land Area
- E. Physical Plant
- F. Etc.

II. Organization of Institution

- A. The Board of Trustees
 - 1. Composition
 - 2. Authority
- B. Administration
 - 1. Composition
 - 2. Relationships

III. Major Administrative Functions

- A. Improving Resident Care
- B. Obtaining and Developing Personnel
- C. Maintaining Intra- and Inter-Agency Relationships
- D. Providing and Maintaining Funds and Facilities

IV. Dynamics of the Institutional System

- A. The Policy-Making and Planning Processes
- B. Operation of Policy-Making Groups
 - 1. The Board of Trustees
 - 2. The Administration
 - 3. The Staff
 - 4. The State Agencies
- C. Communication Patterns
 - 1. Institution-Community
 - 2. Board-Administration
 - 3. Administration-Staff
 - 4. State-Administration

V. Problems of the Institution

- A. Problems Related to Institution-Community Relations
- B. Improvement in Communication within the Institution
- C. Increased Militancy of Employee Groups
- D. Etc.